PROSPECTIVE PAYMENT
ASSESSMENT COMMISSION

MEDICARE AND THE AMERICAN HEALTH CARE SYSTEM

REPORT TO THE CONGRESS

JUNE 1994

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PROSPECTIVE PAYMENT ASSESSMENT COMMISSION

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June 1, 1994

The Honorable Thomas Foley
Speaker
United States House of Representatives
Washington, D.C. 20515

Dear Mr. Speaker:

I am hereby transmitting to the Congress the report *Medicare and the American Health Care System.* This report has been prepared by the Prospective Payment Assessment Commission as required by Section 1886(e)(2)(C) of the Social Security Act.

Sincerely,

Stuart H. Altman, Ph.D.
Chairman

Enclosure

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June 1, 1994

The Honorable Al Gore
President of the Senate
United States Senate
Washington, D.C. 20510

Dear Mr. President:

I am hereby transmitting to the Congress the report *Medicare and the American Health Care System.* This report has been prepared by the Prospective Payment Assessment Commission as required by Section 1886(e)(2)(C) of the Social Security Act.

Sincerely,

Stuart H. Altman, Ph.D.
Chairman

Enclosure

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Executive Summary

Executive Summary

In the last three decades, dramatic advances in medicine, increased service capacity and utilization, and the growth of private insurance and public programs have combined to produce an extraordinary expansion in the use of and spending for medical care. Consequently, the health care system, which accounted for 5 percent of the nation's total domestic economic output in 1960, consumes 14 percent today. Throughout this period, the annual rate of increase in per capita health care spending has consistently been three to five percentage points higher than the general rate of inflation. As a result, real (inflation-adjusted) spending for health care services has doubled since 1980, to an estimated $898 billion in 1993.

The development and expansion of public and private health insurance coverage were responses to the growth in health care spending, but also have contributed to that growth. Insurance coverage stimulates spending by insulating patients from the cost of medical services. As spending has continued to climb, government programs and private payers have begun to take steps to shift to individuals and providers some of the financial risk of furnishing medical care services. Further, rising costs have also made insurance unaffordable for low-income populations and unattractive for some low risk groups. In 1993, 37 million people, or 15 percent of the total population, had no health insurance on any given day. Recent data suggest that about 20 percent of the population may experience a lapse in coverage for at least one month during the year.

The American health care system is undergoing major changes in the financing and delivery of medical care services. This report provides a framework for understanding the evolution and current organization and financing of the health care sector, and identifies major issues the nation must resolve as it considers reforms. The report begins by describing trends in national health care expenditures and the forces that contribute to rising costs and to the growing inability to ensure that all Americans have access to quality care. Much of the effort to control costs has been concentrated on inpatient services provided by hospitals. The report therefore examines recent changes in the delivery and financing of hospital inpatient services, including the Medicare prospective payment system (PPS), and the effects of these changes on hospitals, on services provided in other settings, and on Medicare enrollees. How changes in health care delivery and the payment system interact and what effects these changes have on access to quality care are also considered. Finally, the report discusses state variation in the costs and financing of health care services and states' efforts to control costs and ensure access for their residents.

EVOLUTION OF HEALTH CARE FINANCING AND DELIVERY

With major advances in medicine in the 1920s, the site of care began to move from patients' homes into hospital inpatient settings. New drugs and surgical procedures, coupled with inpatient nursing care and room and board services, substantially raised the cost of medical care. In response, private health insurance was developed during the 1930s with the twin goals of protecting individuals and families from the financial consequences of illness, and ensuring that hospitals would be paid for the services they furnished.

Private health insurance spread rapidly during and after World War II, with the proportion of the population covered rising from less than 10 percent in 1940 to about 70 percent in 1965. Health insurance was an attractive fringe benefit during the war, because cash wages were frozen. Employment-based health insurance continued to expand after the war, in part because the value of the benefit was exempt from taxes. In addition, employers could obtain more extensive group coverage for a given price than workers could secure by purchasing individual policies. The growth of collective bargaining and the desire of employers to attract and retain a highly qualified work force also contributed to the expansion in employer-sponsored health insurance coverage.

Until the 1960s, the financing, organization, and delivery of health care services were primarily

private activities. Federal government policies often influenced the evolution of the system, as in the case of employer-sponsored insurance, but seldom played a direct role in the financing and delivery of care. Federal policy did encourage the expansion of hospital capacity through construction grants and loans (the Hill-Burton program). However, government generally limited itself to filling gaps in a health care system that was largely privately financed. For example, the Federal government subsidized services for aged, blind, and disabled persons through grants to states, while state and local governments operated public hospitals and clinics that provided services to low-income persons.

By 1960, it was apparent that the rising cost of coverage had left many of the elderly and poor without affordable private insurance. Moreover, private donations were not sufficient to allow providers to furnish all the needed charity care. The enactment of the Medicare and Medicaid programs in 1965 greatly expanded insurance coverage to the elderly and the poor, and led to a huge infusion of new revenues for hospitals, physicians, and other providers. Federal policies supporting medical research and the training of physicians and allied health professionals spawned significant advances in treatment capabilities and rapid expansion in health service capacity. The resulting growth in spending put increasing pressure on Federal and state budgets.

During the 1970s, policy makers responded to this pressure with a range of measures, including reforming Medicare and Medicaid payment methods, regulating increases in the supply of hospital and other services, establishing utilization review programs, and encouraging the growth of health maintenance organizations (HMOs). The roles of employers and private insurers also changed. Insurers introduced utilization review mechanisms, limited or reduced benefit packages, and increased beneficiary cost-sharing requirements to control the volume of medical services. Insurers also responded to employers' demands for lower rates by adjusting premiums to reflect expected utilization of each group or individual.

Many large employers whose expenses per employee for health benefits were below average found they could reduce their costs by self-insuring. Under the provisions of the Employee Retirement Insurance Security Act (ERISA) of 1974, self-insurance also permitted employers to administer the same benefits in multiple states while avoiding state premium taxes and state-imposed mandated benefits. As more employers with lower costs opted to self-insure, the average cost for those covered by other insurance rose. These practices raised the premium cost for high risk groups, and ultimately resulted in substantial growth in the number of people unable to pay for private health insurance coverage.

Both public and private sector cost-containment efforts during the 1980s and early 1990s were characterized by attempts to create financial incentives for providers to consider relative costs and benefits in making treatment decisions. In the early 1980s, the "Boren Amendment" removed barriers to state Medicaid cost-containment efforts, and states responded with new hospital financing mechanisms, such as prospective payment systems and selective contracting with providers. This was followed in fiscal year 1984 by Medicare's implementation of prospective payment. PPS changed the basis of Medicare payment for hospital inpatient services from reimbursement of costs to a prospectively determined fixed amount per admission. This created incentives to provide inpatient services for less than the payment amount, shifting some of the financial risk of furnishing inpatient services to the hospital. Subsequently, in the late 1980s and early 1990s, Medicare's physician payment system was restructured to eliminate payments based on historical charges. The underlying principles on which physicians were paid became a resource-based relative value scale designed to adjust the distribution of payments across specialties to reflect certain costs more accurately and provide incentives for less costly primary care. In addition, Medicare established volume performance standards to control total expenditures for physician services by putting physicians at risk for reduced payment updates if aggregate expenditure targets were exceeded.

Private insurers have also responded by adopting risk selection practices and by creating different insurance products that reflect changes in both risk management and the distribution of risk among consumers, insurers, and providers. Risk selection practices, which generally occur in the health insurance

markets for individuals and small groups, reduce the cost of health insurance for relatively low risk groups by reducing or eliminating coverage for high risk groups.

Between 1980 and 1993, the share of the population covered by private health insurance declined from 73 percent to 65 percent. Despite substantial increases in the proportion of people covered by Medicare and Medicaid, the uninsured rose from 11 percent to 15 percent of the population.

Insurance products increasingly involve controls on service use, including limiting the set of available providers and requiring review or approval of services offered to beneficiaries. In many cases, providers assume greater financial risk by contracting to furnish services for a population group at discounted rates or for a fixed aggregate amount. Individuals also are assuming a greater share of the financial risk, through paying higher shares of their health insurance premiums and larger copayments and deductibles.

Despite the attention paid to containing costs, there also have been noteworthy expansions in covered services since the mid-1980s. Medicare has broadened eligibility criteria and coverage rules for skilled nursing care and home health services; Medicaid has revised eligibility criteria to increase the number of recipients. Private insurance increasingly has begun to cover routine physical examinations and well-baby care. Nevertheless, more people have fallen through the cracks in the insurance system. More workers have been burdened with greater financial risk for health care expenses, and many employees have experienced reduced access to coverage as employers have declined to offer health insurance.

EFFECTS OF COST-CONTAINMENT EFFORTS ON EXPENDITURES

Although there have been significant changes in health care financing and delivery systems in response to incremental public and private sector reforms, in aggregate these changes have not produced a lasting reduction in the real rate of growth in health care expenditures. Cost-containment efforts and changes in utilization patterns for hospital inpatient services slowed the rate of growth in inpatient expenditures. This reduced the share of spending for community hospital inpatient services from 27.6 percent in 1980 to 23.8 percent in 1991. However, real growth rates remained high for spending for hospital outpatient services and for physician and post-acute care services.

The uneven application of cost-containment efforts across settings produces incentives to shift sites of care. Similarly, uneven application of such efforts across payers allows providers to pass on increasing costs to some payers rather than change their behavior to reduce expenditures. During the mid-1980s, hospitals' costs for inpatient services rose faster than Medicare and Medicaid payments. Rather than reducing the growth in the cost of care, the hospital industry, in aggregate, recouped the losses on uncompensated care and patients covered by public programs by raising the charges—and therefore the payments—of private sector payers that reimburse on the basis of charges. As losses from Medicare and Medicaid have grown, both hospital charges and private payer payments as a percentage of costs have risen. The most recent data suggest, however, that the rate of increase in hospital costs has diminished, although the extent to which this slowing is attributable to market-originated financial pressure or a response to the current health care reform debate is not known.

FINANCIAL STATUS OF HOSPITALS

The ability to obtain revenues from private payers to cover losses from public payers and uninsured patients has permitted hospitals to maintain, and even increase, total margins. Total margins provide a measure of hospitals' overall financial position. The aggregate total margin for all hospitals rose from 3.3 percent in 1988 to 4.6 percent in 1992. This level is higher than the margins experienced before the implementation of PPS in fiscal year 1984. However, hospitals' ability to use revenues from private payers to cover losses from other patients varies significantly. Thus, while the industry was experiencing near-record total margins, more than one-quarter of all hospitals incurred losses.

Rural hospitals had a higher aggregate total margin than urban hospitals, but were also more likely to incur losses. This reflects the divergent experience of large and small rural hospitals. Half of rural hospitals have fewer than 50 beds. These hospitals

had an aggregate total margin of 2.4 percent, and nearly 40 percent of the hospitals in this group incurred losses. By contrast, rural hospitals with at least 100 beds had aggregate total margins of about 6 percent; less than 15 percent had losses. Major teaching hospitals had relatively little variation in total margins. Thus, although they had a lower aggregate total margin than other groups, they were also less likely to have negative margins.

Because Medicare PPS payments are the largest single source of hospital revenue, they have a substantial impact on hospitals' financial position. PPS operating payments per discharge grew more rapidly than operating costs per discharge in the first year of PPS, but have grown more slowly since. As a result, the aggregate PPS operating margin has been negative since the seventh year of PPS. In the ninth year of PPS (hospital accounting periods beginning during fiscal year 1992), the aggregate PPS operating margin was −2.6 percent. Operating costs per Medicare discharge exceeded PPS payments in nearly 60 percent of hospitals. The aggregate PPS operating margin is estimated to have declined to −6.9 percent in the eleventh year of PPS.

PPS provides financial incentives for hospitals to control the rate of increase in costs per case. However, the decline in the aggregate PPS operating margin indicates that these incentives were not sufficient to slow the rise in costs substantially. The trend in Medicare operating costs tends to mirror the growth in overall hospital costs. The rise in total margins demonstrates that, in aggregate, hospitals have been able to offset declining PPS operating margins by cost shifting to private payers.

There are recent signs, however, that hospitals might be controlling, or preparing to control, cost increases. Preliminary data indicate that the real cost per admission rose 2 percent in 1993, about half the historical rate. Hospital employment trends provide evidence that hospitals are controlling labor costs, which account for more than half of total hospital expense. The rate of increase in the number of full-time equivalent hospital employees slowed from 3.3 percent in 1991 to 2.3 percent in 1992. Preliminary data suggest this trend has continued in 1993: Although total hospital output rose 2.0 percent, total hospital employment grew only 0.7 percent.

SUPPLY OF MEDICAL SERVICES

Potential users of medical services may choose from a much more diverse and complex array of providers than in the past. Advances in technology have allowed services previously delivered on an inpatient basis to be furnished in alternative settings that may be more convenient or less expensive for individual patients. The shift to alternative settings has contributed to the closure of 20 percent of rural hospitals since 1980, and large hospitals have responded by becoming smaller. The function of hospitals has also been changing, adding more technological services while expanding outpatient capabilities. Computerized tomography scanners are becoming common in hospitals with 25 to 49 beds, as are open-heart surgery capabilities in hospitals with at least 100 beds. The proportion of hospitals with organized outpatient services rose from 54 percent in 1985 to more than 90 percent in 1992. Additionally, there were substantial increases in the number of hospitals operating rehabilitation, skilled nursing, home health, and psychiatric and drug dependency units.

From 1975 to 1990, the number of physicians providing patient care rose from 13.5 to 19.5 per 10,000 population. This increase was concentrated among specialists, while the proportion of general practitioners and family physicians declined during this period. Physicians are practicing in a more diverse array of settings. For example, there have been large increases in ambulatory surgery centers, comprehensive outpatient rehabilitation facilities, hospice programs, and dialysis facilities certified by Medicare. Entirely new types of independent providers that specialize in specific procedures or conditions have also emerged, including diagnostic imaging centers and free-standing cancer centers. Growth has not been limited to new types of providers: From 1989 to 1993, there was a 24 percent increase in the number of skilled nursing beds certified by either Medicare or Medicaid.

USE OF MEDICAL SERVICES

The aging of the population contributes to rising demand for health care services and the associated increase in health sector spending. On a per capita basis, medical care expenditures for people 65 and older are nearly double those for 45- to 64-year-

olds and almost four times the average for persons 18 to 44.

Despite a steady rise in the proportion of the population that is elderly, hospital inpatient use has declined dramatically. Between 1979 and 1991, the number of hospitalizations per 1,000 population fell from 157 to 124. Length of stay also dropped, from 7.1 days to 6.4 days. Changes in practice patterns, including the shift of inpatient care to ambulatory settings; the growth of managed care and utilization review; the adoption of financial incentives by insurers; and advances in technology that speed recovery times have all contributed to lower hospital utilization. The types of procedures and surgical operations performed in the hospital have changed significantly, resulting in a marked increase in the intensity of the average hospitalization.

Reductions in the rate of inpatient utilization have been accompanied by substantial growth in the use of post-acute care services. The use of home health agency services, for instance, grew from 1.6 percent of Medicare enrollees in 1974 to 8.0 percent in 1992. In addition, for Medicare enrollees who use home health agency services, the average number of visits per person increased from 21 in 1974 to 53 in 1992.

THE PAYMENT ENVIRONMENT

Approximately 85 percent of the U.S. population has health insurance coverage. One-quarter has public coverage, such as Medicare and Medicaid, and public programs account for about 46 percent of all health care spending. The public share of total spending reflects the higher utilization of the aged—Medicare program spending alone accounting for 37 percent of the total—and considerable Medicaid spending for long-term nursing care for the indigent elderly.

Preliminary estimates indicate that total Medicare Hospital Insurance (Part A) and Supplementary Medical Insurance (Part B) spending reached $149 billion in 1993, an increase of 10.7 percent from 1992. More than 75 percent of total Medicare expenditures were for hospital inpatient care and physician services.

Although much of the growth in Medicare expenditures is due to increases in Medicare spending per enrollee, part has been caused by expanding program enrollment. The number of Medicare enrollees has been growing at an annual rate of about 2 percent. By the end of 1993 there were nearly 37 million Medicare enrollees, 11 percent of whom were eligible because of disability or end-stage renal disease.

Medicare enrollees share in program costs through deductibles and copayments for most services, Part B premiums, and charges in excess of the allowed amount from providers that do not accept assignment. Beneficiary liability—the share of covered services paid by Medicare enrollees—has remained between 21 percent and 23 percent since the 1980s.

Medicaid, an entitlement program jointly funded by the Federal government and the states, is the second largest public payer, targeting low-income families, the aged, and disabled populations. Each state establishes eligibility and coverage standards within guidelines set by the Federal government. The Federal government provides each state with matching payments that vary between 50 percent and 83 percent of total program expenditures.

Medicaid spending totaled about $127 billion in 1993, nearly triple the $47 billion spent in fiscal year 1987. Much of this increase stemmed from higher disproportionate share payments to hospitals, increases in enrollment (particularly between 1990 and 1991), and growth in other spending per enrollee.

About two-thirds of the U.S. population is covered by private insurance. However, the nature of private insurance has changed markedly in recent years. For both indemnity and managed care plans, the proportion of premiums paid by employers dropped from 90 percent in 1988 to between 76 percent and 80 percent in 1993. Most private insurance is purchased on a group basis by employers. By law, employers are required to offer an HMO option if an HMO is available in the area. Employers are changing benefits, self-insuring, and offering more managed care options to limit their costs. In the past, most employers provided indemnity plans, in which medical care is paid for on a fee-for-service basis and no restrictions are placed on the enrollee's choice of provider. However, the proportion of employers offering such indemnity plans

has been declining as businesses have added managed care options. As a result, managed care arrangements, which integrate the delivery and financing of medical services, now cover nearly 100 million people.

ACCESS AND QUALITY

Access to medical care varies substantially, depending on insurance coverage. During the course of a year, about 50 million people will experience a lapse in coverage for at least one month. Although the uninsured have worse health status than the rest of the population, they are less likely than insured persons to receive any medical services. Only 62 percent of the uninsured received any medical services in 1987, compared with 86 percent of the nonelderly population with private insurance. Moreover, the uninsured tend to receive fewer services when they do enter the health care system.

Ensuring the appropriateness and quality of services is critical in an increasingly cost-conscious health care environment. Federal, state, and private initiatives to monitor and ensure quality of care have not kept up with the proliferation of new facilities and providers. Medicare certification, state licensure, and voluntary accreditation are modes of external quality review that seek to ensure the quality of services delivered at different health care sites. However, the requirements of these modes vary across states and groups of providers. Further, there is substantial variation in the proportion of providers subject to review, with less than 1 percent of ambulatory care centers, recovery centers, and home infusion providers seeking voluntary external accreditation.

Medicare's main quality assurance mechanisms are review of hospital inpatient care by Peer Review Organizations (PROs) and certification of specific types of facilities. PROs are independent organizations under Medicare contract to determine whether services were reasonable or necessary. Private sector initiatives, such as the HMO Employer Data and Information Set, are also attempting to monitor and improve quality. Additionally, hospitals and other providers are adopting techniques, ranging from profiling of physician practices to total quality management and continuous quality improvement programs, to measure and monitor quality. Measurement of quality, however, is still in its infancy, and data systems that can be used to compare medical care across all providers are not now in place.

STATE HEALTH CARE SPENDING AND REFORMS

There is substantial variation across states in per capita expenditures for medical services. Spending on hospital services, physician services, and prescription drugs ranges from $1,200 per person in Idaho to $2,400 in Massachusetts. Much of this variation is due to geographic differences in the prices providers must pay for the goods and services that go into patient care, and differences in population characteristics such as age and sex distributions and health status. Some of this variation in per capita spending also reflects the migration of patients across state lines to obtain medical care. It is important to appreciate these factors to understand why health spending has far outpaced inflation in the general economy and what might be done to slow this growth.

States with a large proportion of residents 65 and older, such as Florida and Pennsylvania, tend to have relatively high per capita spending. States with high spending per person also tend to have higher-than-average input price levels. The average wages of California's hospital workers, for instance, are 80 percent higher than those of hospital employees in Mississippi.

The proportion of residents receiving services from providers in other states is related to spending as well. Nearly one-fifth of Medicare spending in North Dakota, which is among the top states in spending per person, is for services provided to Medicare beneficiaries who live elsewhere. By contrast, more than one-quarter of Medicare's spending for beneficiaries who reside in Wyoming, which is near the bottom of the list, is paid to providers in other states.

State-level per capita spending for health care services is also affected by differences in access to various types of services. The degree of access to care reflects both the type of health insurance coverage and the supply of services in a community. On average, nearly 15 percent of the population lacks health care insurance. However, in four states,

more than 20 percent of the population is uninsured, whereas in at least nine states less than 10 percent of the population is uninsured. The extent of insurance may affect the mix and quantity of health care service utilization in a state.

The mix and quantity of health care services may also reflect the use of services in a community. Alaska illustrates this point. It has the lowest rate of hospital inpatient utilization, which probably reflects the population's characteristics and reduced access for the high proportion of residents who live in isolated and sparsely populated areas. Similarly, the high proportion of Wyoming and Idaho residents who obtain care in other states may reflect the low number of physicians relative to the population in those states. Physician practice patterns and the limited availability of long-term care and post-acute care resources probably contribute to the extremely long average length of stay in New York hospitals and to New York's high per capita spending for hospital services, physician services, and prescription drugs.

In the last five years, the rise in health care costs and the growing number of people without insurance have prompted every state to enact some type of health care legislation. These laws range from incremental measures, such as modifying the small employer health insurance market and reforming the medical malpractice system, to comprehensive attempts to restructure the state's health care system.

Several states have enacted comprehensive measures that combine cost-containment and health care coverage goals, most of which encourage the use of managed care arrangements. Hawaii has had a program since 1974. The rest of these reforms are in varying stages of implementation. However, two states have postponed implementation of their reforms, and no others are close to enacting a comprehensive measure. ERISA, which limits states' abilities to regulate employers' self-insured health plans, is a major barrier to implementation of comprehensive legislation. States may also be waiting for the outcome of Federal health care reform efforts before proceeding with their own.

Several states are reforming their Medicaid programs to contain costs by requiring participants to enroll in managed care arrangements. Medicaid managed care enrollment more than doubled between 1987 and 1992, when 12 percent of the Medicaid population was enrolled in such arrangements. In several states, the anticipated savings from managed care will be used to expand Medicaid eligibility to low-income uninsured persons. Most of these plans also require some form of cost sharing by the recipients.

During the 1970s, several states implemented rate setting programs that controlled hospital rates paid by all payers, although Maryland currently is the only one with a Federal waiver to include Medicare under its program. Federal district courts have ruled that certain provisions associated with rate setting programs in some states violate ERISA. Consequently, two of these have deregulated hospital prices, and New York has enacted a temporary extension of its system pending final disposition of its case.

State efforts to increase the purchase of private insurance have focused primarily on reform of the market for health insurance for small businesses. In 1993, 46 states passed some form of "small market" reform. Many of these laws require insurers to issue policies to anyone who applies or to guarantee renewal of insurance policies. Massachusetts, New York, and Vermont implemented community rating laws that prohibit the use of health status or prior utilization of health care services to set premium rates. New York currently is appealing a Federal district court decision invalidating a section of its community rating law.

Several states are also attempting to expand insurance coverage by encouraging small businesses to form purchasing pools or alliances. In 1992, California created the first statewide insurance purchasing pool. In its first two years of operation, this mechanism reduced rates, respectively, by 5 percent and 6 percent below rates for comparable benefits packages offered to small businesses by nonparticipating insurers. However, despite reducing insurance premiums, it is not clear whether this program has produced a substantial increase in the number of Californians with health insurance coverage. Other research has concluded that it is difficult to stimulate small employer participation in health insurance even with substantial premium subsidies.

CONCLUSION

Attempts to design and implement broad reforms of the health care system raise a wide range of policy and technical issues. The resolution of these issues will affect the future size and structure of the health care industry, as well as the composition and distribution of health services, for many years. The most basic issues involve choices regarding whether and how to provide for universal coverage and whether and how to control future growth in health sector spending.

Traditionally, Americans have relied on a welter of hidden subsidies to finance health care services furnished to uninsured and vulnerable populations. The ongoing process of major structural changes in the financing and delivery of medical care services is reducing those subsidies.

Current trends in insurance premiums are likely to result in continuing declines in the prevalence of private insurance. At the same time, pressure to limit costs is likely to diminish the ability and willingness of payers and providers to subsidize care for the uninsured and to exacerbate current inequalities in access to care. Thus, the decision whether to provide universal coverage involves a fundamental choice about society's willingness to redistribute income to ensure access to care for everyone.

A decision to limit further spending growth may entail slowing increases in the supply and use of cost-increasing technologies and a substantial improvement in the utilization of existing capacity. In the absence of effective controls on service use, spending is expected to continue growing, especially if insurance benefits are extended to all. Controlling spending requires changing the behavior of individuals, providers, or both. Market forces and regulation can be used in this effort. In deciding among approaches, the Congress will need to consider their relative effectiveness in limiting inefficient adoption and inappropriate use of technology while maintaining quality of care. Policy makers may need to consider whether cost effectiveness should be a basis for controlling the adoption and use of medical technologies. They will also need to consider the administrative costs of mechanisms to implement and monitor alternative approaches and to take into account the distributional effects on providers, population groups, and regions.

Chapter 1

Issues Facing the American Health Care System

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Americans rely on a mixture of private and public financing mechanisms and a largely private delivery system to meet their needs and desires for health care. Health services are furnished to patients by a wide array of providers, including nonprofit, for-profit, and government-owned hospitals; physicians in solo and group practices; ambulatory surgery centers; free-standing imaging centers; skilled nursing facilities; and home health agencies. The use of services is financed primarily by payments to providers from private insurers and public programs, as well as by direct payments from patients. Most employed people and their dependents obtain health insurance coverage through the workplace. Almost all of the elderly and about one-half of all nonelderly low-income people are covered by tax-financed public programs like Medicare and Medicaid.

These financing and delivery arrangements have evolved over many years in response to rapid advances in medical technology, the spread of insurance coverage among the population, and the payment policies adopted by private insurers and public programs. For more than 30 years, these factors have contributed to sustained expansion of health services capacity, proliferation of providers and sites of care, and relentless growth in the use of and spending for health services. Consequently, the health care industry, which accounted for about 5.3 percent of the nation's gross domestic product (GDP) in 1960, grew to slightly more than 14.1 percent in 1993.[1]

Despite the enormous rise in health care spending, many people lack financial access to basic health care services. On any given day during 1993, an estimated 37 million people, or nearly 15 percent of the population, had no health insurance.[2] In addition, both the number of persons and the share of the population lacking health insurance have been growing steadily for more than a decade.[3] Although the uninsured receive health services financed by various means, accumulating evidence suggests that they get less care than those with insurance.[4] Moreover, the uninsured's access to care is often haphazard, and services frequently are provided in inappropriate settings like hospital emergency departments.

In response to these problems, the nation and its political leaders are reexamining current financing and payment mechanisms and considering policy reforms that could have major effects on the American health care system. Finding the means to slow the continuing growth of health spending while providing insurance coverage to all is a challenging task that may require fundamental changes in current approaches to the financing, organization, and delivery of care. Any reform of these arrangements, however, also must be acceptable to the American public, a requirement that may be difficult to meet because of the large number of interests involved.

This chapter focuses on the major problems affecting the nation's health care system today and issues the Congress will have to consider in attempting to find acceptable solutions. It begins by highlighting long-term trends in aggregate health expenditures and insurance coverage, shifts in the distribution of spending by source of payment and type of provider, and the effects of these trends on government budgets and on expenditures by employers and households. This is followed by an analysis of the major forces responsible for these trends, with emphasis on the roles of technological change, insurance coverage, and third-party payment policies. The chapter concludes with a brief discussion of major issues facing the Congress in the development of health care reforms.

Chapter 2 provides information on the financial condition of hospitals—revenues, expenses, and margins. Chapter 3 examines recent changes in the delivery and financing of health care service, and the

effects of these changes on providers and Medicare beneficiaries, including beneficiaries' access to quality care. Chapter 4 describes state variation in the costs and financing of health care services, and states' efforts to control costs and ensure access for their residents.

OVERALL TRENDS IN HEALTH CARE SPENDING AND INSURANCE COVERAGE

Over many years, the nation's health care financing and delivery system has evolved in response to the interaction of powerful economic forces. These have included rapid advances in medicine, the spread of private and public health insurance, insurers' policies in making payments to providers of services, and changes in the economy as a whole. Together, these forces have led to sustained growth in health care expenditures, shifts in the financing and use of services among sources of payment and types of providers, and, more recently, a steady increase in the number and proportion of people who lack health insurance coverage. These broad trends and their effects on government budgets and spending by employers and households are described below.

The Rapid Growth of Health Care Expenditures

Total national spending for health care has increased dramatically and continuously for more than 30 years, rising from $27 billion in 1960 to an estimated $898 billion in 1993 (see Table 1-1).[5] The total for 1993 amounted to about $3,358 per person, at a time when per capita GDP—total domestic economic output per person—was estimated at $23,422.[6] Recent projections by the Congressional Budget Office (CBO) suggest that health spending will continue to grow rapidly in the near future, exceeding $1 trillion in 1995 and reaching $1.6 trillion by the year 2000.

The long-term growth of national health expenditures reflects the combined effects of four major factors: economywide price inflation, population growth, input price increases specific to the health sector, and expansion of the real amount of resources per person devoted to health care. On average, aggregate nominal health spending (unadjusted for inflation) rose 11.2 percent per year between 1960 and 1993. General inflation in the economy averaged 4.7 percent per year during this period, accounting for 42.0 percent of the overall rise in spending. Population growth averaged 1.0 percent a year, accounting for another 8.9 percent of the total. The rest of the increase in spending (slightly less than one-half of the total) was attributable to health sector input price inflation and growth in the amount of real resources per capita used to produce health care, which increased at a combined rate of 5.1 percent per year.[7]

Table 1-1. National Health Spending, Selected Years

Year	Total Spending (In Billions)		Per Capita Spending	
	Nominal	Real[a]	Nominal	Real[a]
1960	$ 27.1	$ 121.9	$ 143	$ 641
1965	41.6	176.0	204	862
1970	74.4	260.4	346	1,213
1975	132.9	342.1	592	1,523
1980	250.1	439.5	1,064	1,869
1985	422.6	567.9	1,712	2,301
1990	675.0	746.8	2,604	2,880
1993[b]	898.4	898.4	3,358	3,358
1995[b]	1,069.1	1,010.4	3,921	3,706
2000[b]	1,613.3	1,309.1	5,675	4,605
Average annual change				
1960-1993	11.2%	6.2%	10.0%	5.1%
1993-2000	8.7	5.5	7.8	4.6

[a] Adjusted by a variant of the consumer price index for all urban consumers (CPI-U-X1) and expressed in 1993 dollars.

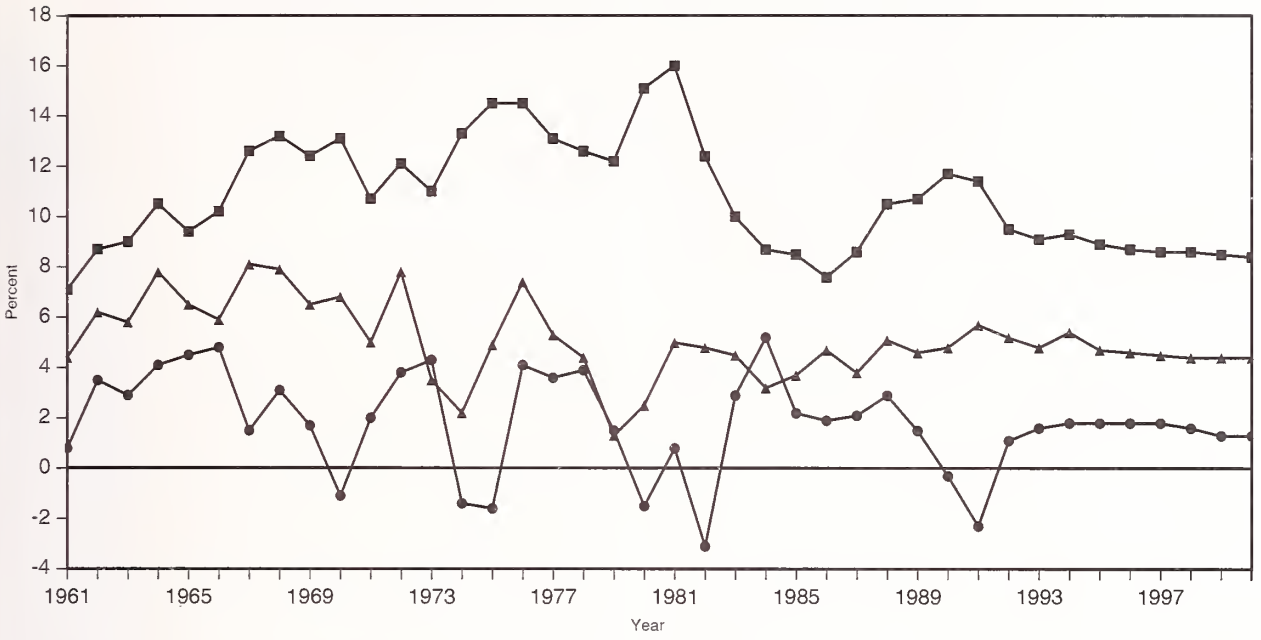
[b] Projection.

SOURCE: Health Care Financing Administration, Office of the Actuary, and the Congressional Budget Office for projections.

The annual rate of increase in nominal health expenditures has fluctuated widely since 1960 (see Figure 1-1). This is largely due to substantial variation in the rate of general inflation during this period. It also reflects fluctuations in other conditions in the general economy, such as changes in overall growth rates and shifts in government policies, including both broad policies and those specifically aimed at the health industry. To a lesser extent, the growth of health spending has been influenced by gradual shifts in the demographic composition of the population. Population subgroups 65 to 84 and 85 and older, which use about three times more health care per person than younger people, have grown faster through most of this period.

Real national health spending per capita excludes the effects of general price inflation and overall

Figure 1-1. Change in National Health Spending, 1961-2000 (In Percent)



Note: Real per capita national health spending adjusted by a variant of the consumer price index for all urban consumers (CPI-U-X1) and expressed in 1993 dollars. Real per capita GDP adjusted by GDP implicit price deflator and expressed in 1993 dollars. Data are projected for 1992 through 2000. GDP = gross domestic product.

SOURCE: Health Care Financing Administration, Office of the Actuary, and the Congressional Budget Office for projections.

population growth (though not changes in age composition). Between 1960 and 1993, the growth rate of real expenditures per capita generally was three to five percentage points higher than that of the economy as a whole (measured by annual changes in real GDP per capita). Despite the downturn in economic growth during four recessionary periods, real per capita spending for health care rose annually, with an increase exceeding 3 percent in all but three years during this period. In the absence of significant changes in health care financing policies, expenditures for health services are expected to continue to outpace overall economic growth over the next five to seven years.

Shifts in Sources of Payment and Spending by Sector

As noted above, the long-term growth of national health expenditures has been driven partly by the development and spread of private insurance and public programs designed to finance the use of health services. Over time, these changes in the financing of care have resulted in shifts among the sources of payments to providers of care.

In 1965, the last year before the implementation of Medicare, about 75 percent of total spending for health care was financed from private sources (see Table 1-2). About one-third of private expenditures came from health insurers, while out-of-pocket payments by patients accounted for most of the

Table 1-2. National Health Spending, by Source of Payment, 1965 and 1991 (In Percent)

Payment Source	1965	1991
Medicare	0.0%	16.3%
Medicaid	0.0	13.4
Other government programs[a]	24.7	14.2
Private	75.3	56.1
Health insurance	24.0	32.5
Out of pocket	45.7	19.2
Other[b]	5.5	4.4

[a] Includes Department of Defense, Department of Veterans Affairs, Public Health Service, Federal research, Federal and state and local workers' compensation, subsidies to hospitals, and public health activities.

[b] Includes industrial in-plant health services, provider non-patient revenues, private donations, and privately financed construction.

SOURCE: Health Care Financing Administration, Office of the Actuary.

balance. Public funds accounted for only one-quarter of total spending, reflecting the relatively narrow roles played by Federal, state, and local government programs at that time. This category included expenditures by the Veterans Administration and the Department of Defense, the Public Health Service, Federal and state workers' compensation, maternal and child health, vocational rehabilitation, other public and general assistance programs, and public health activities.

Following the implementation of Medicare and Medicaid in 1966, spending began to shift from private to public sources. By 1991, the public share of total expenditures had increased to about 44 percent, while the share attributable to private spending had fallen to 56 percent. This overall shift among private and public sources was accompanied by changes in the distribution of private spending. The implementation and expansion of Medicare substantially reduced out-of-pocket liabilities for almost all the elderly and some disabled people, while state Medicaid programs had the same effect for about one-half of the nonelderly low-income population. The share of the population covered by private insurance continued to increase through most of this period, reaching its peak around 1980 and declining slowly thereafter. Consequently, the relative importance of out-of-pocket spending fell from about 46 percent in 1965 to slightly more than 19 percent in 1991. The share of spending attributable to private insurers climbed from 24 percent to almost 33 percent during the same period.

At the same time, spending for health services was also shifting among health sectors (see Table 1-3). Hospital care accounted for a growing share of total expenditures until the early 1980s and then dipped thereafter. The expansion in the early part of the period primarily reflects the implementation of Medicare and Medicaid and the ongoing growth of private insurance coverage. It also shows the effects of changes in technology, such as the development of open-heart surgery and improvements in trauma care, which steadily enhanced the capabilities of inpatient care while raising service intensity and costs.

As expenditures continued to increase, however, government programs and then some private payers took steps to reduce their spending. Public and private payers questioned the need for inpatient acute care and encouraged the use of less costly providers and sites of care. In addition, payers attempted to control the level of payments to hospitals, physicians, and other providers. These policies strengthened the effects of changes in technology and medical practice, which were beginning to shift the site of care from inpatient acute care settings to less expensive outpatient settings.

Table 1-3. National Health Spending, by Sector, Selected Years (In Percent)

Sector	1965	1983	1991
Hospitals	33.7%	41.0%	38.4%
Inpatient[a]	19.2	29.1	23.8
Outpatient[a]	1.8	4.7	8.0
Other[b]	12.7	7.2	6.5
Nursing facilities	4.1	8.0	8.0
Home health agencies	0.1	0.8	1.3
Physicians	19.7	16.9	18.9
Other personal health care[c]	27.9	21.0	21.3
Other spending[d]	14.4	12.2	12.2

[a] Includes patient care spending in community hospitals.

[b] Includes patient care spending in Federal and noncommunity hospitals, and spending for non-patient services in all hospitals.

[c] Includes dental services, other professional services, drugs and other medical non-durables, vision products, and other medical durables.

[d] Includes research, construction, public health activity, administrative costs of health insurers, and net cost of insurance.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Together, these changes led to substantial declines in the use of hospital inpatient services and rapid growth in spending for services furnished in other settings. Consequently, the share of spending attributable to hospital inpatient services dropped from about 29 percent in 1983 to slightly less than 24 percent in 1991. Meanwhile, the share of spending for hospital outpatient services increased from about 5 percent in 1983 to 8 percent in 1991.

The shares of health expenditures attributed to other health sectors also changed markedly during this period, especially spending for post-acute services such as home health care. These trends show the effects of the liberalization of coverage rules under Medicare and Medicaid that occurred during the 1980s. In addition, they reflect changes in payment policy that encouraged the substitution of rehabilitation care, skilled nursing care, and home health care for services that formerly were provided during a hospital inpatient stay.

Throughout this period, rising spending was accompanied by rapid increases in insurance premiums. Growing costs of insurance and fundamental changes in employment patterns in the general economy combined to drive up the number and proportion of persons who lack health insurance coverage. These changes are described below.

Declines in Health Insurance Coverage

At any point during a year, many people experience a lapse in health insurance coverage, leaving them without financial protection against the high cost of a serious illness. Moreover, many of the uninsured are likely to remain without insurance coverage for a long time.

Because nearly everyone 65 and over is entitled to benefits under the Medicare program, lapses in insurance coverage occur almost entirely among people under 65. Since most people in this group obtain health insurance through the workplace, this problem is closely associated with the occurrence of unemployment and related characteristics, including age, income, education, and ethnic origin. Many small employers do not offer health insurance to their workers; consequently, the uninsured population also includes a substantial number of full-time employed persons and their dependents.

According to data from the Current Population Survey, both the number and proportion of persons without insurance have been increasing for more than a decade.[8] In 1980, about 66 percent of the population, or 148 million people, had insurance coverage through an employer-sponsored plan; 7 percent (15.5 million) had coverage under individual insurance purchased outside of employment (see Table 1-4). The Medicare program covered nearly all the elderly population and some disabled persons, totaling 24 million people, or about 11 percent of the population. State Medicaid programs covered another 5 percent of the population, or about 12 million persons, most of whom had very low incomes. About 24 million people (about 11 percent of the population) had no health insurance on the day the survey was taken.

By 1993, the proportions of the population covered by employer plans and individually purchased insurance had declined to 58.5 percent and 6.0 percent, respectively. Enrollments under the Medicare and Medicaid programs both increased, however, covering more than 56 million people in 1993—up from about 35 million in 1980. Thus, the proportion of the population covered by these programs rose from about 16 percent in 1980 to almost 21 percent in 1993. Nevertheless, the population without insurance coverage also grew over the period, reaching 37 million people in 1993, or 14.7 percent of the population. Most of the increase in this population occurred during two periods: from 1983 to 1985, and then each year since 1988.

Table 1-4. Source of Health Insurance Coverage, Selected Years (In Percent)

Source of Coverage	1980	1985	1990	1993
Employer*	66.3%	63.2%	62.2%	58.5%
Individual	6.9	6.2	6.0	6.0
Medicare	10.7	11.7	12.4	12.8
Medicaid	5.2	5.6	5.9	8.1
Uninsured	10.8	13.2	13.6	14.7

Note: Data reflect source of primary health insurance coverage. Columns may not add to 100 due to rounding.

* Includes coverage via the military, the Department of Veterans Affairs, and the Civilian Health and Medical Program of the Uniformed Services.

SOURCE: Congressional Budget Office, October 1993, based on data from the March Current Population Survey, Department of Commerce, Bureau of the Census.

While these data count the number of persons who lack insurance at a point in time, the Survey of Income and Program Participation provides information about the dynamics of lapses in coverage by tracking individuals over a longer period.[9] The most recent data show that 47 million people (20 percent of the population) experienced a lapse in coverage for at least one month during calendar year 1990. About 60 million people, or one out of every four persons, had such a lapse during the 32-month survey period from February 1990 to September 1992.

Such lapses in insurance coverage are unevenly distributed among population groups. As noted above, Medicare covers almost all elderly persons. Consequently, only about 1 percent of the elderly experienced a lapse in coverage during the 32 months of the survey. Almost half of all young adults 18 to 24 years old, however, were uninsured

for at least one month during this period. A similar percentage applied for low-income persons (those whose family income was below 200 percent of the Federal poverty level) and Hispanics.

The length of the period without insurance also varies among those who experience a lapse in coverage.[10] Data from the mid-1980s suggest that about 40 percent are without insurance for six months or fewer. Many appear to be unemployed or recently reemployed workers who are waiting for coverage to commence. At the other extreme, at least 28 percent of all those who become uninsured remain without coverage for more than a year, and between 15 percent and 18 percent have a spell that lasts more than two years. Thus, a substantial portion of those who experience a lapse in coverage lose their insurance for a long time.

A smaller proportion of employers offer health insurance today than during the mid-1980s. (See Chapter 3.) Further, even those that provide coverage to full-time employees are more likely than ever before to hire temporary workers, part-time employees, or self-employed contractors who do not receive health benefits. In addition, the continuing rise in private health insurance premiums makes it less likely that such persons can afford to purchase insurance on an individual or non-group basis.

The duration of lapses in coverage probably also has been affected by the requirement that employers allow workers who leave their jobs to purchase continuing coverage under the employer's health benefit plan for up to 18 months following job separation. This requirement, enacted in the Consolidated Omnibus Budget Reconciliation Act of 1985, probably has permitted many people to retain their health insurance coverage during short periods of unemployment. As a result, the current uninsured population may include fewer short-term unemployed people, leaving a higher proportion of people with relatively long lapses in coverage. For all these reasons, spells without health insurance may be longer today than the historical data suggest.

The Burden of Rising Spending

The continuing rapid growth of health expenditures has put increasing pressure on the current sources of health care financing. Historically, consumption of health services and supplies has been financed by the spending of Federal and state and local governments, businesses, and households. Data compiled by the Health Care Financing Administration (HCFA) show that the burden of health spending has risen dramatically for all four sources (see Table 1-5).[11]

For each financing source, these data show direct spending for health services and supplies relative to a measure of the total resources available to that source.[12] For example, direct spending by the Federal government covers only net spending for health services and supplies that is supported by general revenues. This includes net spending under programs like Medicare and Medicaid after subtracting earmarked payroll taxes and premiums paid by businesses and households. It also includes spending for the government's contribution to private health insurance premiums and to the Medicare Hospital Insurance Trust Fund on behalf of its employees.

Table 1-5. Burden of Direct Spending for Health Services and Supplies, by Source, Selected Years (In Percent)

	Government[a]		Private	
Year	Federal	State and Local	Businesses[b]	Households[c]
1965	3.5%	8.0%	1.8%	4.3%
1980	11.6	14.1	4.9	4.0
1985	14.4	15.4	5.9	4.5
1991	20.5	21.4	7.6	5.1
Percentage of personal income in 1991[d]				15.0

[a] Direct spending as a percentage of general revenues; includes health expenditures financed by general revenues and governments' contributions on behalf of their employees for health insurance premiums and to the Medicare Hospital Insurance Trust Fund.

[b] Direct spending as a percentage of total compensation to employees; includes employer contributions for private health insurance premiums, to the Medicare Hospital Insurance Trust Fund, to the medical portion of workers' compensation and temporary disability insurance, and spending for in-plant health services.

[c] Direct spending as a percentage of aggregate personal income; includes expenditures for health insurance premiums, employee payroll taxes and premiums for Medicare, and out-of-pocket spending for services not covered by insurance and for deductibles and copayments.

[d] Total direct spending from all sources as a percentage of aggregate household personal income in 1991.

SOURCE: Health Care Financing Administration, Office of the Actuary, and Council of Economic Advisers for personal income.

The burden of total direct spending is measured for Federal, state, and local goverments as a percentage of their total general revenues. An analogous measure for businesses is based on their direct spending relative to total compensation paid to employees each year. The burden on households is calculated by comparing direct spending to total personal income.

These figures reflect the changing roles of the traditional sources of health care financing. The burden of direct health outlays by Federal, state, and local governments increased rapidly after 1965, accounting for about one-fifth of their total general revenues by 1991. The relative burden of spending by businesses and households also grew, but has not reached a level comparable to government expenditures.

Ultimately, however, households bear the full burden of all spending for health services and supplies: This amounted to 15 percent of aggregate personal income in 1991. Governments finance health outlays through the imposition of taxes and fees that are paid by businesses and households. Similarly, business spending for health care and any government taxes and fees are shifted to households in the form of higher prices for the firm's products, lower wages to employees, or smaller returns to owners.

The shifting of business spending for health services in the form of lower wages for employees is apparent in the trends for the components of real (inflation-adjusted) business compensation per employee. From 1965 to 1991, total real compensation per employee rose at an average annual rate of 0.6 percent, with a cumulative gain of about 18 percent (see Table 1-6). Over the entire period, real wages and salaries per employee increased only 6.9 percent, but real employer spending for health services and supplies skyrocketed 450 percent. Moreover, most of the growth in real wages and in total compensation occurred between 1965 and 1970. From 1970 to 1991, the cumulative change in real wages and salaries per employee was only 0.4 percent, while the comparable increases in real total compensation and spending for health benefits were 8.4 percent and 234 percent, respectively. Clearly, rising employer contributions for their employees' health insurance and Medicare coverage have come at the expense of growth in real wages.

Table 1-6. Change in Components of Real Compensation Per Employee, Selected Years (In Percent)

Years	Total Compensation[a]	Wages and Salaries	Health Benefits[b]
Average annual change			
1965-1970	1.7%	1.3%	10.5%
1970-1975	0.6	-0.2	7.6
1975-1980	-0.2	-0.7	5.8
1980-1985	0.7	0.6	5.7
1985-1991	0.5	0.3	4.8
1965-1991	0.6	0.3	6.8
Cumulative change			
1965-1970	8.7	6.5	65.1
1970-1991	8.4	0.4	234.1
1965-1991	17.8	6.9	451.5

Note: Data are deflated by the consumer price index (CPI-U).

[a] Includes compensation for private industry and Federal, state, and local governments per employee for all workers (both full- and part-time).

[b] Includes employer contributions for health insurance premiums, to the Medicare Trust Funds, and to workers' compensation and temporary disability insurance.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Another perspective on the rising burden of spending for health care may be obtained by examining the trend in estimated total health expenditures as a percentage of GDP. Increases in real GDP per capita represent one measure of improvement in the nation's standard of living and its ability to pay for additional health care or other goods and services. Because real health spending per capita has been rising more rapidly than real economic growth, health care has been consuming an ever-increasing share of total resources. Since 1960, the share of GDP devoted to health care has grown from 5.3 percent to 14.1 percent in 1993. This means that Americans have been consuming relatively less of other goods and services in return for more health care. In the absence of major changes in policy, this trend is projected to continue, with health care spending reaching slightly more than 18 percent of GDP by the year 2000.

Underlying Problems in Health Care Markets

Aggregate health expenditures may simply reflect the collective preferences of consumers, given their incomes and their evaluation of the benefits and costs of health care relative to those of other goods and services. If this were true, the fact

that Americans have chosen to consume relatively more of health care and less of other things would be of little or no concern.

Many analysts have pointed out, however, that decisions of consumers and providers are strongly affected by unusual factors. The purchase of health care differs from that of most other goods and services in two fundamental respects. Since individuals face uncertainty about the possibility of illness, insurance provides a mechanism to limit the risk of large expenditures for health services. The introduction of insurance, however, alters the behavior of both consumers and providers of health care. A second major difference lies in the dual roles played by the physician as an adviser and advocate for the patient, as well as a direct provider of services. The conflicts embedded in these roles tend to compound the distortions that occur when insurance reduces the prices for health services faced by those who have coverage.

These problems are inherent in the nature of illness and the medical care process. They often have been exacerbated, however, by the development of specific institutional arrangements used in paying for health services and health insurance. These include the methods private insurers and public programs have used to make payments to physicians and other providers of care, and implicit and explicit subsidies for the purchase of health insurance.

As explained below, some of these factors are likely to result in greater consumption and less efficient production of services than otherwise would occur. Others encourage the purchase of overly comprehensive insurance coverage, while creating inequities in financial access to insurance.

Problems in the Market for Health Services—Insured people face prices for health services that are either negligible or much reduced, and this substantially weakens their financial incentives to weigh the benefits of each service against its cost. Most patients also lack the ability to evaluate the benefits of alternative clinical interventions. Therefore, they often delegate to their physician much of the decision making about the use of services.

Physicians, acting on their patients' behalf, know that insured patients bear only a small fraction of the cost of covered services. Consequently, doctors have little incentive to consider the actual cost of care in making decisions about the use of services. Moreover, the incentive to order any service that may provide positive benefits to the patient is reinforced by physicians' professional values and training, along with the threat of malpractice litigation.

How physicians and other providers are paid by private insurers and government programs also affects service utilization and the cost of producing medical services. Doctors paid on a fee-for-service basis can increase their revenues by providing more services to patients. The potential for overuse of services is magnified because payments to physicians generally are made independently of payments to other providers. Thus, doctors order services from other providers, such as hospitals, skilled nursing facilities, laboratories, and home health agencies, but bear no financial responsibility for the costs of these services. In addition, until recently, these providers frequently have been paid on the basis of charges or costs rather than competing on the basis of price. Therefore, they have had little incentive to find and use the most efficient production methods or treatment strategies.

The prevalence of comprehensive insurance among patients, fee-for-service and charge- or cost-based payment of physicians and other providers, and strong preferences for high-quality care have led to competition on the basis of quality rather than price. Providers tend to compete to attract physicians (and thereby patients) by offering the latest technology and other amenities. This has spurred the adoption and use of many cost-increasing technologies, without full consideration of the benefits of these services relative to their costs. This phenomenon has played a key role in the rapid growth of health care spending.

Problems in the Market for Health Insurance—There are three major problems in the market for health insurance. The first is that current income tax policies encourage many people to purchase more comprehensive insurance benefits than they would choose otherwise. Most people obtain their health insurance coverage as an employer-sponsored fringe benefit. The tax-exempt status of fringe benefits alters workers' financial incentives, making an extra dollar of employer contributions to

health insurance more attractive than an extra dollar of wages. By encouraging the purchase of more extensive insurance, this distortion probably strengthens the effects of insurance on patients' decisions about the use of health services.

The other two problems involve setting and maintaining fair insurance rates and providing everyone with financial access to insurance. These problems arise, in part, because the financial risk associated with illness varies substantially among the population. In addition, differences in risk are difficult to measure reliably, and they are largely unrelated to household income. That most insurance is purchased on a group basis, with group membership generally unrelated to potential risk, also contributes to these problems.

The financial risk of large medical expenditures makes health insurance attractive, but it also has other implications. A plan with a specific set of benefits will be worth more to high risk people than to those with low risk. Similarly, choices among insurance plans with different benefits are likely to be strongly influenced by a person's perception of risk. That is, people tend to select insurance plans with covered benefits that best meet their perceived needs.

If differences in potential risk could be measured easily and reliably, insurers could assign each person or family to a risk group based on their characteristics and then set a premium rate for each risk group for a given insurance plan. Such rates would be efficient and fair in the sense that the premium amounts would be closely related to the expected benefits. With rates set in this way, however, insurance coverage would be unaffordable for high risk people with low incomes. Consequently, without subsidies, some people would be left with no insurance.

Measuring risk differences and making adjustments for them, however, are difficult tasks. Even with a substantial amount of information about the characteristics of individuals, current risk assessment methods cannot measure their potential risk levels reliably. Consequently, insurers lack the ability to set fair rates based on each individual's risk level. This exposes the insurer to potential losses if its rates do not adequately reflect the use of services of those who select the plan.

In the small group and individual insurance markets, competing insurers have responded by using various methods to limit their risk. These methods, including selective marketing, refusing to insure some people, and denying benefits related to preexisting conditions, are aimed at avoiding enrollment or limiting coverage for high risk people. Recently, so-called small market reforms in many states have limited the ability of insurers to exclude people or to impose other limitations on coverage and benefits.

Most people, however, purchase health insurance coverage on a group basis through their employer. As a result, most insurance groups are based on characteristics, such as employer and industry, that are only loosely related to variations in the financial risk of illness. Setting premium rates on a group basis, therefore, creates implicit subsidies among the members of each group. Low risk people subsidize those with high risk, since all group members pay the same premium rate. Although this makes coverage more affordable for high risk persons with low incomes, it also subsidizes those with high risk and high incomes. In addition, for low risk people, the group rate may be substantially higher than the relative value of the insurance policy's expected benefits. This may lead some with low risk, particularly those with low incomes, not to buy insurance even though they would prefer having it.

Historically, insurers have used two different approaches to set premium rates. In one approach, called experience rating, the insurer sets a separate premium rate for each group based on its own experience. Over time, experience-rated premiums reflect the average risk level of each group. Consequently, high risk groups face high premiums, and insurance coverage may be unaffordable for some groups. Those who purchase coverage on an individual basis (for example, self-employed or unemployed people) face the same problem.

An alternative approach is community rating, in which an insurer offers a given insurance policy to all people or groups at the same rate or premium, which is based on the overall average experience of the community. As with experience rating, the low risk members of any insured group subsidize those with high risk. In community rating, however, the subsidies are likely to be larger because of systematic

differences in the average level of risk among the groups in the community. (For example, construction workers may have a higher average financial risk of illness than the members of a law firm.) Thus, community rating generally would make insurance coverage more affordable for high risk people. On the other hand, it also would result in a greater burden on low risk people and increase subsidies to those with high risk.

Nevertheless, many people support using community rating, along with subsidies for low-income people, to improve financial access to insurance. Proponents of these proposals also see community rating as a means of simplifying consumers' price comparisons among competing health insurance plans. As noted above, however, people with different risk levels are likely to choose health plans with different benefits. Under community rating, health plans also have strong financial incentives to attract low risk people while avoiding those with high risk. Consequently, it would be necessary to adjust each plan's rate to reflect the average risk level of the people who actually enroll. Although this would be difficult to do, given the current state of the art, it would be needed to avoid the failure of plans that serve relatively high risk individuals.

The problems identified above affect the allocation of resources, with health services consuming too much of total resources relative to their benefits. As the use and costs of medical care rise, so do insurance premiums, leaving more people unwilling or unable to afford coverage. These people are left to face the full financial risk of a major illness. Consequently, there are serious inequities in the distribution of health services among the population.

These problems also underscore the difficulty of designing an efficient and equitable financing and delivery system. Current financing and delivery arrangements have evolved from a succession of private and public choices regarding the relative roles of government and the private sector in addressing these problems. These arrangements also reflect, in part, the values Americans have associated with medical care, particularly the belief that the distribution of such services should not be determined entirely by household income. The following section reviews the evolution of these choices over time.

THE EVOLUTION OF THE HEALTH CARE SYSTEM

The development of modern health care financing and delivery arrangements began in the 1920s and 1930s. Many of the issues facing policy makers today are directly related to changes in the health care system that have occurred in the years since then. For this discussion, the evolution of the system is divided into three periods: the development and spread of private health insurance from the 1920s up to 1960, the expansion of the role of government and experimentation with cost-containment strategies in the 1960s and 1970s, and the period of cost containment and restructuring since 1980.

The Development of Private Health Insurance

The expansion of the health care industry and the evolution of its organization and financing have been driven by rapid and sustained technological change and private and public responses to that change. Major advances in medicine during the 1920s and 1930s began to alter both the type and site of care, moving treatment from patients' homes into hospital inpatient settings. New drugs and surgical procedures, coupled with inpatient nursing care and room and board services, however, substantially raised the cost of medical care.

The escalating cost of hospital care and declines in personal income during the Depression led to the emergence of private health insurance in the late 1930s. Private insurance was designed to protect individuals and families from the financial consequences of illness, and to ensure that hospitals would be paid for the services they furnished. Its introduction and spread stimulated demand for services and total spending for people who had coverage. Increased spending also was encouraged by the provider payment policies adopted by private insurers. The resulting growth in revenues improved the financial strength of the hospital industry, and fostered expansion of capacity and adoption of new equipment and technology.

The proportion of the population covered by private insurance shot up from less than 10 percent (12 million) in 1940 to more than 65 percent (123 million) in 1960.[13] Much of this growth was due to

the rapid spread of employer-sponsored health coverage, which was strongly encouraged by the wage and tax policies adopted by the Federal government during World War II. While wages were frozen, employers could offer or expand fringe benefits, including health insurance. Fringe benefits became a more important element of labor compensation during this period, as employers sought to attract scarce workers. After the war, when wage controls were lifted, the tax-exempt status of fringe benefits continued to make employer-sponsored health insurance attractive to unions and workers. Employers were largely indifferent to the choice between paying higher cash wages or higher fringe benefits, since both were treated as tax-deductible business expenses with equivalent effects on tax liabilities and profits. In addition to the tax benefits, employment-based insurance was purchased on a group basis at premium rates that were often well below the amounts insurers charged non-group subscribers for the same coverage.

Individual purchases of health insurance outside of employment also spread during this period. The rising cost of care exacerbated the financial risk associated with serious illness, making health insurance more attractive. Moreover, real per capita income increased substantially during this time. Although insurance premiums were rising, more people could afford to purchase coverage.

While the number of people with health insurance was growing, covered benefits were expanding as well. Initially, most insurance products covered only expenses for hospital inpatient services furnished to the covered worker or individual subscriber. In the 1940s insurers gradually broadened the set of covered services to include surgical expenses (surgeons' fees for inpatient surgical procedures and in-hospital visits) and then expenses for other physician services. During the 1950s, insurers added major medical insurance covering a broad set of benefits up to a high expense limit. Coverage was also extended to subscribers' dependents (family coverage).

The spread of insurance and continuing advances in technology and medical practice fueled rapid increases in the demand for hospital and physician services and in aggregate health care spending. Growth in health expenditures in turn helped to finance expansion of service capacity and the development and adoption of further improvements in technology. However, these changes also raised health care costs and private insurance premiums.

Until the 1960s, the organization, financing, and delivery of care were primarily private activities. Private physicians and nonprofit hospitals provided services to patients in return for fees or charges paid directly by the patient or by a private insurer. Charity care furnished to those unable to pay also was largely private, supported by private donations and higher payments from insurers and patients who were able to pay.

During this period, Federal government policies often influenced the evolution of the financing and delivery system, as in the case of employer-sponsored insurance, but seldom played a direct role in the financing and delivery of care. Federal policies encouraged the expansion of hospital capacity through construction grants and loans under the Hill-Burton program, and subsidized delivery of services to specific groups like the aged, blind, and disabled through grants to the states. State and local governments also generally played a residual role, subsidizing some charity care in private hospitals, and operating public hospitals and clinics that provided services to low-income persons. Thus, to a limited extent, government helped to fill major gaps in an otherwise privately financed health care system.

Expansion of the Role of Government in the 1960s and 1970s

By 1960, the rising cost of private insurance had left many of the elderly and the poor unable to afford coverage. In addition, the relative importance of private donations had begun to decline, threatening the financial capacity of providers to furnish charity care. This led to the enactment of the Medicare and Medicaid programs in 1965. The expansion of insurance coverage under these programs, along with the decision to adopt provider payment methods similar to those generally in use under private insurance, led to strong increases in demand and a huge infusion of new revenues for hospitals, physicians, and other providers.

Federal policies regarding health research and education also stimulated the pace of technological change and the growth of health spending. The

large and sustained investment in basic biological research and health science applications through the National Institutes of Health led directly or indirectly to significant advances in the treatment of disease. Federal spending for training of physicians and allied health professionals also helped to expand the supply of key health workers, enabling rapid growth in health service capacity.

The continued growth in spending put pressure on Federal and state budgets by raising the cost of public programs, such as Medicare and Medicaid. It also raised private insurance premiums, resulting in reduced real growth in cash wages for employed persons and higher costs for individuals who purchased coverage outside of employment.

During the 1970s, public and private policy makers began to respond to this pressure by developing and implementing a variety of strategies to contain spending. Federal and state policy makers experimented with a wide range of policies that were intended to change provider behavior and restructure the health care delivery system. Some policies focused on reform of the provider payment methods used in the Medicare and Medicaid programs. They included limiting reimbursement of costs incurred by hospitals and other institutional providers and constraining allowable increases in physician fees. In addition, a number of states implemented experimental systems for making payments to hospitals, such as budget review and prospective payment mechanisms. Other Federal policies established requirements for internal utilization review and external review, by Professional Standards Review Organizations, of the appropriateness of admission and of the services furnished during hospital inpatient stays.

Federal policy makers also required states that had not yet done so to develop and implement health planning using Certificate of Need programs. These programs were designed to limit unnecessary duplication of services and facilities among providers serving the same geographic area. Initiatives promoting the regionalization of certain costly health facilities, for example, the Regional Medical Program, were begun at about the same time.

In addition, the Congress encouraged the proliferation of health maintenance organizations (HMOs). Because they integrate financing and delivery of a comprehensive set of benefits in return for a fixed premium per person (or family), the Congress believed HMOs would have strong financial incentives to economize on use of the most expensive services, such as hospital inpatient care. Consequently, policy makers expected that the spread of such organizations would help to reduce the rate of growth of health spending.

The roles of employers and private insurers also were changing. During the 1970s, large employers began to discover that they could reduce their expenses for health benefits by self-insuring. Such firms avoided paying a premium to an insurance company to bear financial risk. In addition, they could avoid the expense of premium taxes imposed by the states. The shift to self-insurance was further encouraged by the Employee Retirement Income Security Act (ERISA) of 1974, which prohibited states from imposing health insurance benefit requirements (mandated benefits) on self-insured plans. By 1991, an estimated 74 percent of firms with 1,000 to 2,499 employees and 41 percent of firms with fewer than 500 employees had chosen to self-insure.[14]

The spread of self-insurance also helped to foster significant changes in insurance rating practices. Together with utilization-driven increases in insurance premiums, these changes ultimately reduced the amount of financial protection afforded by insurance while raising the cost of insurance for high risk groups. Eventually, this contributed to the decline in the proportion of the population covered by private health insurance.

Until the middle of the 1970s, most group and individual health insurance products were sold by commercial and mutual insurance companies and nonprofit Blue Cross and Blue Shield plans. Commercial insurers generally used experience rating to set a separate premium for each group they covered. Under the pressure of competition, the premium rate for each group was adjusted to reflect its actual use of services. To remain competitive, insurers also held down the cost of insurance by using other techniques, such as excluding coverage for services related to preexisting medical conditions.

In their early years, Blue Cross and Blue Shield plans generally served a whole state or substate area,

offering a community rate to all persons or groups in the region. Community rating provided favorable rates for high risk groups financed by implicit subsidies from low risk groups. By the 1970s, the rising cost of care had increased the size of these subsidies, giving employers with younger, healthier workers strong financial incentives to withdraw from the community by self-insuring or by purchasing experience-rated insurance. This led to the breakdown of community rating and raised the cost of insurance for high risk groups and individuals. Over the long term, this resulted in substantial growth in the number of people unable or unwilling to pay for private health insurance coverage.

Cost Containment and System Restructuring in the 1980s and 1990s

Drawing on the experience gained in the 1970s, both public and private sector cost-containment efforts during the 1980s and early 1990s were distinguished by a growing emphasis on the use of risk sharing arrangements between payers and providers. Rather than simply lowering provider payment rates to reduce expenditures, payers implemented strategies to change the financial incentives providers faced under traditional fee-for-service and cost-based payment methods. These strategies were designed to make providers bear financial risk regarding the cost of care, thereby strengthening their incentives to consider relative costs and benefits in making treatment decisions. At the same time, technological advances allowed the provision of sophisticated medical care, at less cost per treatment, outside of the hospital inpatient setting. Together these phenomena resulted in significant restructuring of both the financing and delivery systems.

Cost-Containment Efforts—Public insurers were the first to implement major payment reforms. In 1981, the Congress passed the so-called Boren Amendment, which removed barriers state Medicaid programs faced in introducing cost-containment plans. During the early 1980s, states responded with new hospital payment systems and selective contracting with providers. This was followed in 1983 by Medicare's implementation of the hospital prospective payment system (PPS). This system changed the basis of Medicare's payments to hospitals for inpatient care from retrospective costs to a prospective fixed rate per discharge.

Payments for inpatient care were the focus of initial reforms because they make up the largest single component of health care expenditures. PPS is intended to lower program costs by providing financial incentives for hospitals to improve efficiency in producing inpatient services and to reduce the length of stay and the quantity of services provided during a hospital stay. Hospitals that provide care for a patient at a cost less than the prospective rate are able to keep the difference, while those that exceed the rate are at risk for the loss. PPS also indirectly altered the behavior of physicians, who faced pressure from hospital administrators to control the use of services. Similarly, increased emphasis on utilization review and the implementation of Peer Review Organizations had a sentinel effect on physician medical decision making, primarily through the threat of payment denials if a procedure was deemed inappropriate.

This was followed in the late 1980s and early 1990s by the development and implementation of a physician payment reform strategy for the Medicare program. One part of this strategy was a revised physician fee schedule. The new schedule relies on a resource-based relative value scale designed to reflect resource costs more accurately and promote the use of less costly primary care. As a result, the distribution of payments among physician specialties and geographic areas was substantially affected. Payment reform also included volume performance standards designed to give physicians financial incentives to control the volume of physician services provided to Medicare beneficiaries. These incentives are created by putting physicians as a group at risk for smaller increases in future payment rates if growth in aggregate service volume causes expenditure targets to be exceeded.

In addition to cost-containment initiatives undertaken by the public sector, various private sector activities took aim at health care expenditures. Because employee health benefit costs were increasing rapidly during the 1980s and early 1990s, many employers began to take a more aggressive approach to cost containment. Broad structural changes that were occurring in the American economy also affected employers' willingness to offer and pay for health insurance for their employees.

Economic conditions in the 1980s led many businesses to shrink and restructure their work force to increase their flexibility in responding to changes in the market. Use of contract labor became more common, allowing firms to tailor their work force while avoiding the associated health care and other fringe benefit costs. This was accompanied by shifts in employment among sectors of the economy.[15] Manufacturing and mining—industries that traditionally provided a fuller array of health benefits for employees and dependents—experienced substantial work force reductions. At the same time, service industries—which are more likely to "import" health care coverage from other industries through dependent coverage—expanded rapidly. In effect, this shift in work force resulted in less complete coverage or elimination of coverage for some workers.

In addition, beginning in 1993, standards set forth by the Financial Accounting Standards Board require employers to change how they reflect retiree health benefits in their records of financial performance. Rather than account for retiree health benefits when actually paid out, employers must now reflect future benefit expenses on their current accounting records. This change creates a strong incentive for employers to lessen or even eliminate health care coverage for retirees.

Employers also were more aggressive in their management of health benefit costs, adopting several strategies to reduce their costs. More employers chose to self-insure, avoiding state benefit mandates and premium taxes while reducing or eliminating the payment of risk premiums to insurance companies. Most self-insured employers attempted to shift some of their financial risk to health care providers through managed care techniques designed to control utilization. Employers that continued to use insurers for administrative services and reinsurance sought to shift some of their risk to the insurance companies, demanding lower fees and premiums. They also shifted more risk to their employees through increased cost sharing (higher deductibles and copayments and caps on coverage). Further, some employers stopped offering coverage or reduced their outlay for employee benefits by using more contract labor and part-time workers.

Insurance companies responded to these changes with heightened attempts to manage their own level of risk. By creating different insurance products that included managed care and other controls on service use, they pressured providers to lower costs. They also employed various risk selection practices, such as excluding coverage for preexisting conditions or eliminating coverage of certain high risk groups.

Driven by increasing costs, these changes weakened the system of employer-based health care coverage. More workers were burdened with greater financial risk for health care expenses. In addition, more people fell through the cracks, as some high risk employee groups and individuals lost coverage. Some states established voluntary risk pools for people without coverage, but this did not stem the rise in the number of uninsured and underinsured workers.

Restructuring of the Insurance and Delivery Systems—Today, health care insurance markets are characterized by a proliferation of insurance products that range from more traditional fee-for-service indemnity plans, most with some sort of utilization review, to capitated HMOs with salaried physicians and hospital ownership. (See Chapter 3.) In between are arrangements such as preferred provider organizations and independent practice associations with varying degrees of cost sharing and provider choice for consumers and varying degrees of risk sharing imposed on providers. In addition, many insurance companies and other firms offer claims processing and case management services for self-insured firms.

The combination of the growth in risk sharing arrangements and utilization review with changes in technology has accelerated the shift toward the use of less costly services outside the hospital inpatient setting. Fixed payment per discharge under PPS provided strong financial incentives to shorten acute care inpatient stays. In response, the provision of many post-acute care services moved out of the hospital inpatient setting and into other settings where payment is often based on the provider's incurred costs or charges. For some types of care, the provision of services for all but the most acute cases was moved entirely outside the inpatient setting, resulting in a major expansion of alternative sites for ambulatory care.

While the site of many services shifted, the intensity of services in both the inpatient and

outpatient settings continued to increase. Neither PPS nor managed care strategies slowed the adoption and use of costly high-technology procedures in either setting.

Increased demand in the outpatient setting stimulated the growth of hospitals' competitors, including free-standing ambulatory surgery and diagnostic imaging centers, and increased the volume of surgical procedures provided in physicians' offices. The number of post-acute care providers, such as skilled nursing facilities and home health agencies, also grew.

This led hospitals to either establish or purchase providers of such non-inpatient services to maintain revenues. During the 1980s and early 1990s, there was a great deal of restructuring in the hospital sector. Hospitals merged with, acquired, or affiliated with other institutions to create larger systems to compete effectively for patients under managed care contracts.

Hospitals also have begun developing financial risk sharing arrangements with physicians to attract patients and provide incentives for physicians to control costs more effectively. Providers—both hospitals and physicians—have begun to enter the insurance market, just as insurers have begun to purchase providers, blurring the distinction between financing and delivery. The most recent trend in the 1990s is toward integrated networks, which combine insurance functions with the delivery of a complete continuum of inpatient, ambulatory, and post-acute care services.

The Impact of Cost-Containment Efforts on Expenditures—Significant changes have occurred in the health care financing and delivery systems in response to incremental public and private reforms. Until recently, however, these changes have had only a limited influence on the rate of growth of health care expenditures. Between 1980 and 1983, real health expenditures, adjusted for inflation, grew at an average annual rate of 5.8 percent (see Table 1-7). The impact of cost-containment efforts appeared in the mid-1980s, when the rate of growth declined to 4.8 percent per year from 1983 to 1987. However, it rose again to an annual rate of 6.1 percent between 1987 and 1991.

The effect of focusing cost-containment efforts on hospital inpatient care is reflected in variations

Table 1-7. Change in Real National Health Spending, by Sector, 1980-2000 (In Percent)

Sector	1980-1983	1983-1987	1987-1991	1991-2000[a]
Total	5.8%	4.8%	6.1%	5.7%
Hospitals	5.9	3.7	5.5	5.4
Inpatient[b]	7.6	2.2	3.5	4.2
Outpatient[b]	10.6	12.9	12.4	10.1
Other[c]	-2.3	2.7	5.8	1.9
Nursing facilities	6.0	4.8	6.0	6.5
Home health agencies	20.4	6.2	18.6	15.6
Physicians	6.2	7.7	6.2	6.0
Other personal health care[d]	5.0	5.9	5.3	5.8
Other spending[e]	5.5	2.4	8.6	3.3

Note: Average annual rate of change in national health spending adjusted by a variant of the consumer price index for all urban consumers (CPI-U-X1).

[a] Projection.

[b] Includes patient care spending in community hospitals.

[c] Includes patient care spending in Federal and noncommunity hospitals, and spending for non-patient services in all hospitals.

[d] Includes dental services, other professional services, drugs and other medical non-durables, vision products, and other medical durables.

[e] Includes research, construction, public health activity, administrative costs of health insurers, and net cost of insurance.

SOURCE: Health Care Financing Administration, Office of the Actuary, and the Congressional Budget Office for projections.

in the rate of growth in real expenditures across sectors. Although the growth rates of inpatient and overall hospital spending slowed significantly during the mid-1980s, outpatient expenditures continued to rise at a high rate throughout the period. Real spending for nursing facility care, and especially home health services, also slowed in the mid-1980s, while physician expenditures showed a modest increase in the rate of growth.

Toward the end of the decade, from 1987 to 1991, growth rates began to rise to pre-PPS levels. The acceleration of expenditures for nursing facility and home health care after 1987 resulted partly from liberalization of Medicare coverage guidelines and higher program spending when the Medicare Catastrophic Coverage Act was in effect in 1988. Physician expenditures continued to increase at a steady rate. It is too early, however, to evaluate the long-term impact of physician payment reforms.

The growth rate of inpatient and overall hospital expenditures also climbed after 1987, reversing the

initial downward trend experienced after the introduction of PPS. Much of this acceleration can be explained by two phenomena. One is greater intensity of services resulting from the continuing growth in the complexity of inpatient cases and the introduction of new technologies. Second is stepped-up cost shifting by hospitals. Cost shifting occurs when hospitals compensate for the losses they incur on one set of patients by increasing revenues received from others. Because cost-containment efforts are applied unevenly among payers, providers have been able to pass on increases in spending to payers that have less market power (or are less vigilant) rather than change their behavior to reduce costs.

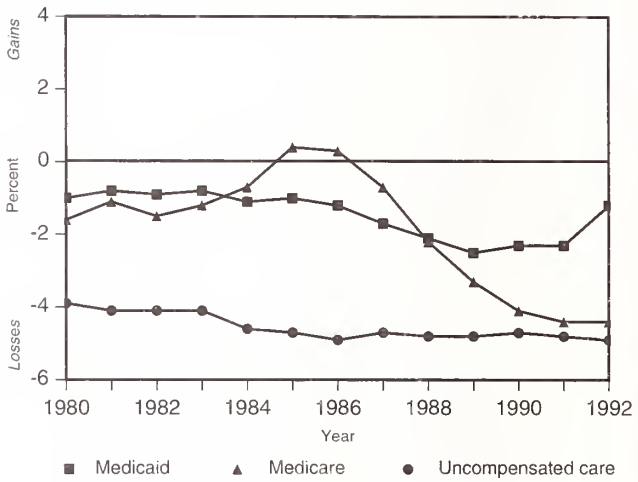
Although Medicare's PPS lowered the growth in program payments, hospitals' costs of treating Medicare patients continued to increase rapidly. After the first two years of PPS (when payment rates were set higher than intended relative to hospitals' costs) the costs hospitals incurred to treat program beneficiaries increased significantly faster than Medicare's payments. Consequently, hospitals experienced increasing losses from Medicare (see Figure 1-2).

Hospitals also use cost shifting to cover other unreimbursed costs incurred in treating Medicaid recipients and in providing uncompensated care. The need to obtain additional revenues from other payers is offset, to some extent, by direct subsidies paid to hospitals by state and local governments.

During the mid-1980s, hospitals' aggregate losses due to Medicaid rose in response to growth in the number of Medicaid recipients and constraints on payments in many states. In the early 1990s, state Medicaid programs began to make substantially larger payments to hospitals. This occurred because hospitals challenged Medicaid cost-containment policies in many states, and because states began to make additional payments to disproportionate share hospitals (those that serve a disproportionate share of low-income patients). Consequently, hospitals' Medicaid losses leveled off in the early 1990s.

Similarly, uncompensated care losses rose somewhat during the mid-1980s, but held steady thereafter. The change in the trend probably reflects several factors, including growth in the number of Medicaid recipients (many of whom otherwise would have been uninsured) and declines in uncompensated care that hospitals provided to uninsured people.[16]

Figure 1-2. Losses as a Percentage of Total Hospital Costs for Medicaid, Medicare, and Uncompensated Care, 1980-1992



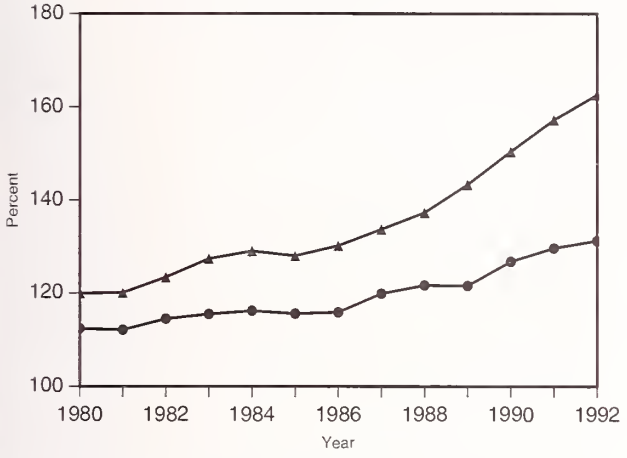
Note: For each payment source, losses are the difference between the cost of providing care and the payment received. Operating subsidies from state and local governments are considered payments for uncompensated care, up to the level of each hospital's uncompensated care costs. Due to reporting inconsistencies related to Medicaid disproportionate share hospital payments and provider-specific taxes, there are significant margins of error for the numbers related to all payers in 1992.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

In 1992, states substantially increased Medicaid disproportionate share payments, further reducing hospitals' Medicaid losses as a percentage of total costs. A small portion of the additional payments was offset because state and local governments also reduced direct subsidy payments to hospitals. Consequently, hospitals' losses from uncompensated care went up slightly.

Rather than restraining cost growth to the levels believed to be appropriate by Medicare, hospitals recouped the increasing losses on public programs and uncompensated care by raising their charges. This led to higher payments from private payers that reimburse hospitals on the basis of charges (see Figure 1-3). After 1986, as losses from Medicare and Medicaid began to grow, both hospital charges and private payers' payments rose relative to their share of costs.

Figure 1-3. Hospital Charges and Private Payer Payments as a Percentage of Costs, 1980-1992



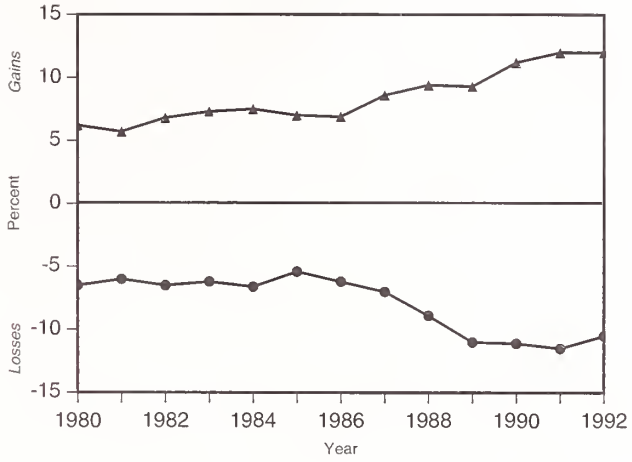
▲ Hospital charges as a percentage of total patient care costs

● Private payer payments as a percentage of private payer costs

Note: Due to reporting inconsistencies related to Medicaid disproportionate share hospital payments and provider-specific taxes, there are significant margins of error for the numbers related to all payers in 1992

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

Figure 1-4. Total Gains and Total Losses as a Percentage of Hospital Costs, 1980-1992



▲ Total gains (from private payers and operating subsidies above uncompensated care costs)

● Total losses (from Medicare, Medicaid, other government payers, and uncompensated care)

Note: Gains and losses are the difference between the cost of providing care and the payment received. Operating subsidies from state and local governments are considered payments for uncompensated care, up to the level of each hospital's uncompensated care costs. Excludes non-patient care income. Due to reporting inconsistencies related to Medicaid disproportionate share hospital payments and provider-specific taxes, there are significant margins of error for the numbers related to all payers in 1992.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

Between 1980 and 1992, these gains from private payers as a percentage of costs almost exactly matched total losses (see Figure 1-4). In 1992, hospitals faced losses totaling $26 billion from Medicare, Medicaid, other government programs, and uncompensated care. These losses were balanced by $29.5 billion in gains from private insurers (see Table 1-8). Because of hospitals' ability to cost shift (and to raise revenue from non-patient care sources), the industry has been able to maintain a substantial level of net revenue throughout this period. Individual hospitals, however, vary in their ability to practice cost shifting. (See Chapter 2.)

Cost shifting is reflected in overall expenditure growth rates by payer. Medicare's average annual rate of growth in real spending fell to 5.4 percent during the mid-1980s, remaining fairly constant through 1991 (see Table 1-9). The average annual growth rate in real spending by private insurers also declined, to 5.1 percent. It then accelerated faster than Medicare's, increasing by an average of 7.0 percent annually between 1987 and 1991. The steadily rising rate of growth in Medicaid spending during the period reflects the increased number of recipients as well as disproportionate share payment policies.

The Current Environment—Overall, public and private reform efforts implemented in the 1980s and early 1990s had only a limited impact on the growth of health spending; they do not appear to have changed the long-term upward trend. Although the delivery system has been somewhat reconfigured, advances in medicine continue to drive up the demand for and the costliness of care. At the same time, rising health insurance premiums and changes in employment patterns have resulted in higher numbers of uninsured individuals.

The most recent data, however, show a slowdown in the rate of increase of real hospital costs per unit of output. According to data from the American Hospital Association's National Hospital Panel Survey, the growth rate of real costs per adjusted admission declined from 5.0 percent in 1992 to 1.8 percent in 1993.[17] (See Chapter 2.) Whether this drop is due to structural changes in the industry or reactions by hospitals to health care reform pressures is unclear. It may be that

Table 1-8. Gains and Losses on Payment for Hospital Services, by Source, 1992

Payment Source	Payment to Cost Ratio	Gain or Loss (In Billions)
Below-cost payment		
Medicare	0.89	$ -10.8
Medicaid	0.91	-3.0
Other government payers	0.98	-0.1
Uncompensated care*	0.19	-12.1
Total		-26.0
Above-cost payment		
Private insurers	1.31	29.0
Operating subsidies above uncompensated care*		0.5
Total		29.5

Note: Due to reporting inconsistencies related to Medicaid disproportionate share payments and provider-specific taxes, there are significant margins of error for the numbers related to all payers in 1992.

* Operating subsidies from state and local governments are counted as payments for uncompensated care, up to the level of each hospital's uncompensated care costs. Additional subsidies above this level are shown as a separate revenue source.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

Table 1-9. Change in Real National Health Spending, by Payment Source, 1980-2000 (In Percent)

Payment Source	1980-1983	1983-1987	1987-1991	1991-2000[a]
Total	5.8%	4.8%	6.1%	5.7%
Medicare	9.7	5.0	5.4	7.5
Medicaid	3.7	6.0	13.4	9.9
Other government programs[b]	1.4	5.6	4.6	2.5
Private	6.3	4.4	5.3	4.6
Health insurance	7.8	5.1	7.0	5.5
Out of pocket	4.2	4.1	2.5	3.0
Other[c]	7.6	1.7	5.7	3.6

Note: Average annual rate of change in national health spending adjusted by a variant of the consumer price index for all urban consumers (CPI-U-X1).

[a] Projection.

[b] Includes Department of Defense, Department of Veterans Affairs, Public Health Service, Federal research, Federal and state and local workers' compensation, subsidies to hospitals, and public health activities.

[c] Includes industrial in-plant health services, provider non-patient revenues, private donations, and privately financed construction.

SOURCE: Health Care Financing Administration, Office of the Actuary, and the Congressional Budget Office for projections.

responses to recent cost-containment pressures and restructuring are starting to have a permanent impact on costs and, therefore, on expenditures. On the other hand, the rate of increase in hospital expenses has slowed during previous periods when major health care reforms have been actively debated.[18] The current decline in the growth rate may once again reflect a short-term response to concerns about reform.

ISSUES FACING THE CONGRESS IN THE DESIGN OF HEALTH CARE REFORM

Advances in medical technology, the reliance on private and public insurance, and the payment methods adopted by payers have contributed to rapid increases in health care spending. As expenditures have continued to climb, government programs and private payers have encouraged the use of less costly providers and sites of service delivery. In addition, payers have attempted to control the level of payments to hospitals, physicians, and other providers through rate negotiation, capitation, and other methods. These policy changes have begun to shift some of the financial risk of insuring enrollees from payers to hospitals and other providers, as well as to individuals. These factors are transforming the organization and delivery of health care services.

Current financing arrangements include a wide array of implicit and explicit subsidies for various population groups. These range from higher private insurance premiums, which subsidize unsponsored care for the uninsured, to payroll taxes that fund services provided to the elderly and disabled under Medicare. Other subsidies are enjoyed by high-income persons because of the tax treatment of fringe benefits. Within insured groups, people with low financial risk of illness subsidize the premiums of those with high risk, regardless of income.

These conflicting patterns of explicit and implicit subsidies tend to obscure from providers and consumers the real cost of health insurance coverage and the real cost of care. Consequently, they may cause distortions in the production and use of health services. In addition, they have created unintended but important inequities among population groups, with the number of Americans who lack financial access to basic health care rising steadily.

The growing magnitude of these problems has led to pressure for reform of the financing, organization, and delivery of health care. Attempts to design and

implement broad reforms of the health care system raise a wide range of policy and technical challenges. How these concerns are resolved will affect the future size and structure of the health care industry and the composition and distribution of health services for many years. This section briefly reviews the major issues that the Congress is confronting in the design of a health care reform plan.

The most basic policy concerns revolve around choices regarding whether and how to provide for universal health insurance coverage of the population, and whether and how to control future growth in health care spending. Although choices about universal coverage and control of spending are somewhat interrelated, they can be separated for the purposes of this discussion. It is important to understand, however, that the ultimate outcomes of health reform—who is covered; for what benefits; who pays and how much; how rapidly spending continues to grow; and how spending is distributed among health providers, regions, and population groups—depend on both sets of choices.

Issues Related to Universal Coverage and Financing

The decision to provide universal coverage involves a fundamental choice about whether society is willing to redistribute income more extensively to ensure access to care for everyone. Traditionally, Americans have relied on a private insurance system, with the government assuming responsibility for the elderly and some of the poor. The millions of Americans without insurance depend upon a mixture of direct and indirect subsidies to finance the health care services they receive. Trends in insurance premiums and structural changes in the economy are likely to result in continuing declines in the prevalence of both employer-sponsored and individually purchased private insurance coverage. The pressure of rising health spending is also likely to promote stronger cost containment by public and private payers. Consequently, the willingness and ability of payers and providers to subsidize care for the uninsured is likely to diminish. In the absence of universal coverage, this will exacerbate current inequalities in access to care.

Congressional consideration of a mandate for universal coverage requires resolving a set of difficult policy choices. These include who is responsible for initiating and maintaining coverage, what is included in the benefit package, who pays the premiums for coverage, how the premiums are determined, and what pattern of financial subsidies will be used to ensure coverage for low-wage workers or low-income unemployed persons. Extending insurance coverage to all the uninsured would likely increase the amount of health spending and alter its distribution. In addition, the Congress also will have to resolve critical questions regarding the timing for extending coverage and for implementing related financing mechanisms.

To mandate universal coverage, the Congress will need to determine who will be responsible for securing coverage. Various proposals under consideration assign responsibility to employers, individuals, or the government. Building on the current system, one approach requires employers to offer insurance to all employees. An individual mandate also is necessary to provide coverage for the self-employed or unemployed. An alternative approach requires all individuals to purchase insurance. Other proposals call for enrolling everyone in a government-sponsored program. The Congress also is debating whether and how to integrate Medicare, Medicaid, and other public programs into a new system.

The most contentious issue confronting the Congress is the assignment of responsibility for financing coverage. An employer mandate requires employers to make some contribution to premiums, with employees paying the balance. Government-sponsored subsidies would assist low-income and unemployed individuals and certain firms. Various types of taxes, such as levies on cigarettes, income, and insurance premiums above a certain level, are being considered to fund these subsidies. Most health care reform proposals also help fund universal coverage through savings obtained from reductions in the growth of spending in existing public programs such as Medicare.

Another approach under consideration is an individual mandate. This would require each person or family to pay the cost of the premium, although employers could continue to make voluntary payments. Subsidies could be given to people with low incomes, funded by taxes or savings from current programs. Proposals for a government-sponsored

program rely on direct financing through taxes, although savings from existing programs also would be used. In this case, the pattern of subsidies would be determined by the tax financing method.

Proposals to use a private insurance mechanism rather than a government-sponsored program to expand coverage must also address the consequences of risk selection. Individual or employer mandates allow people to choose among competing health plans, creating multiple risk pools similar to the current insurance market. Multiple risk pools create the potential for health plans to compete by selecting individuals at low risk for illness rather than by improving efficiency. This could be mitigated to some extent by small market insurance reforms, including state risk pools with subsidies for people with high risk and low income. Recent experience with voluntary risk pooling arrangements in the states suggests that such efforts are likely to be only partially effective at best. Many small employers and individuals are apparently unwilling or still unable to buy insurance even at substantially lower prices. To avoid the problems associated with risk selection, the Congress is debating alternative methods to regulate insurer behavior.

Most reform proposals require insurers to cover anyone who selects their plan, though insurers may be allowed to continue using experience rating. If they do, however, high risk groups and individuals would face substantial premiums. Consequently, the Congress may want to consider subsidies for those people. Community rating builds subsidies between low risk and high risk groups into the rating mechanism, but health plans then have incentives to avoid riskier groups to increase profits. Therefore, if community rating were adopted, the Congress would need to consider ways to adjust payments to insurers to reflect the risk profile of those who actually select each plan.

Under any of these approaches, the Congress will need to assess the likely costs and effectiveness of alternative administrative mechanisms to distribute subsidies to those who purchase coverage, and to channel funds from buyers to insurance plans or providers of care. Finally, policy makers must also consider the potential economic effects these choices may have on employers, individuals, and insurance plans, as well as their potential effects on health care providers and patients.

Issues Regarding Control of Health Spending

In the absence of effective controls, spending for health care is likely to continue growing, especially if insurance is extended to everyone. A decision by the Congress to control future increases in spending involves a fundamental judgment about the trade-offs between additional medical care and other goods and services. Much has been written about achieving major reductions in the growth of health spending by eliminating waste, inefficiency, and high administrative costs. A substantial portion of the historical growth in health expenditures, however, has been driven by technological change and increased utilization of services. Therefore, the decision to limit future spending growth would require slowing somewhat the adoption and use of cost-increasing new technologies and using current technology and service capacity more efficiently and appropriately. With effective spending constraints, some individuals probably would have to forgo some of the services they now receive that are of little or no clinical value. Health care providers also would face strong incentives to reduce the growth in the amount and price of labor and other inputs they purchase to furnish care.

The Congress is debating options to control spending that raise several important concerns. One major question is the appropriate mix of direct regulation and financial incentives, including the administrative mechanisms that would be necessary to implement the strategy. A second concern is the choice of whose behavior to change—insurers, providers, or consumers—and how to bring about this change. Most proposed strategies lie on a continuum that ranges from managed competition without a cap on spending to managed competition and rate setting with a government-determined spending limit. These strategies also vary in the extent to which the government imposes additional requirements applicable to all payers and providers.

Under managed competition, pressure to control costs is applied by informed consumers and other purchasers, through their selection of plans. Government regulation is used to enhance competition in the private insurance and service delivery

markets. Supporters of this approach believe that by promoting price competition in the insurance market, spending growth will slow as consumers choose the most efficient plans and the plans pressure providers to reduce their costs.

Under rate setting, the pressure to control costs is applied directly on providers through government rate regulation using, for example, a prospective payment system for hospital care or a fee schedule for physician services. Rate setting proposals under consideration include a single-payer system financed and run by the government as well as the expansion of Medicare to cover the poor and certain employed individuals.

The Congress also is considering whether to apply additional pressure to control costs through explicit limits on the rate of growth in spending. Under managed competition, a cap on the growth in premiums is being considered. Rate setting proposals also contain a cap on spending for services using either global or sector-specific budgets or volume performance standards.

In considering a cost-containment policy for the nation, the Congress is attempting to balance many factors. As with the debate on coverage for the uninsured, a major point of disagreement is the relative roles and responsibilities of the government and the private sector to control spending. Other considerations include the relative effectiveness of alternative approaches in limiting the inefficient adoption and inappropriate use of technology and services, while maintaining quality of care. The administrative cost of mechanisms necessary to implement and monitor each approach is also a factor. In addition, policy makers are assessing the impact on the distribution of spending across geographic regions and among and within different types of health providers, as well as the effects on access and quality of care. Other issues to be resolved include state flexibility in implementing reforms instituted at the Federal level, regulation of graduate medical education, and malpractice and antitrust reform.

Universal coverage and cost containment are but two of the many complex issues that the Congress faces in enacting health reform. To be successful, attempts to improve the equity and efficiency of the health care financing and delivery system must be grounded in an understanding of current institutional arrangements. These arrangements reflect the interaction of powerful social and economic forces over many years, and a succession of decisions that have been made by institutions and individuals in response to these forces. Much of the debate centers on the relative roles and responsibilities of the Federal, state, and local governments and the private sector. The outcome will, in large part, be determined by choosing an appropriate balance between the desire to provide access to health care for all or most of the population and the perception that health care should be efficiently produced and allocated. These issues will likely continue to be discussed in the years to come. This chapter and this report are intended to provide information that will be useful to that discussion.

Notes to Chapter 1

1. Prospective Payment Assessment Commission analysis of historical health expenditure data from HCFA, projections from the Congressional Budget Office, and gross domestic product estimates from the Council of Economic Advisers, *Economic Report of the President, 1994* (Washington, DC: U.S. Government Printing Office, 1994) 268.

2. Congressional Budget Office estimates based on data from the March 1993 Current Population Survey conducted by the Bureau of the Census, U.S. Department of Commerce.

3. U.S. Congress, Congressional Budget Office "Projections of National Health Expenditures: 1993 Update," October 1993.

4. Jack Hadley, Earl P. Steinberg, and Judith Feder, "Comparison of Uninsured and Privately Insured Hospital Patients," *Journal of the American Medical Association* 265(3):374-79, January 16, 1991.

5. National health expenditures include personal spending on health services and supplies, other spending on services and supplies, and spending for research and construction. Data on national health expenditures are compiled by HCFA with breakdowns by type of provider and source of funds.

6. Congressional Budget Office, "Projections: 1993 Update," October 1993.

7. The average annual growth rate of real spending per capita reflects increases in the real opportunity costs of per capita health spending in terms of other goods and services forgone. It includes changes in both the quantity of resources used to produce health care and the input prices paid for those resources. Since the health industry's input prices have increased more rapidly than prices in the economy as a whole, real resources devoted to health care have increased at a rate somewhat lower than 5.1 percent.

8. Since 1980, annual data on the prevalence of health insurance and the primary source of coverage have been collected in March through the Current Population Survey conducted by the Bureau of the Census.

9. The Survey of Income and Program Participation is conducted periodically by the Bureau of the Census, U.S. Department of Commerce.

10. Katherine Swartz, "Dynamics of People Without Health Insurance," *Journal of the American Medical Association* 271(1):64-66, January 5, 1994.

11. Cathy A. Cowan and Patricia A. McDonnell, "Business, Households, and Governments: Health Spending, 1991," *Health Care Financing Review* 14 (3): 227-48, Spring 1993.

12. Expenditures for health services and supplies exclude spending for health research and construction, which together account for about 3 percent of aggregate health expenditures.

13. Health Insurance Association of America, *Source Book of Health Insurance Data*, 1993 (Washington, DC: HIAA 1993).

14. A. Foster Higgins & Co., Inc., Foster Higgins Health Care Benefits Survey (Princeton, NJ: A. Foster Higgins & Co., Inc., 1992).

15. Deborah Chollet, "Employer-Based Health Insurance In A Changing Work Force," *Health Affairs:* 13(1):315-26, Spring 1994.

16. Glenn Melnick and Joyce Mann, "Do Competition and Rate Regulation Limit Hospital Care for the Uninsured?" *Health Care Financing and Organization News and Progress*, March 1994, 1-2.

17. Adjusted admissions is an output measure that reflects both inpatient and outpatient services. For more detail, see this report's glossary.

18. Marsha Gold and others, "Effects of Selected Cost-Containment Efforts: 1971-1993," *Health Care Financing Review* 14(3):183-25, Spring 1993.

Chapter 2

Hospital Costs, Financial Condition, and Payment Policy

Chapter 2

Hospital Costs, Financial Condition, and Payment Policy

Hospitals are the largest sector of the health care delivery system, accounting for nearly 40 percent of national health expenditures. Spending for hospital services has consistently grown faster than inflation over the last decade. As a result, public and private payers have focused cost-containment efforts on these institutions.

Despite their rapid cost growth, hospitals generally have maintained a relatively stable financial condition. This is even more notable given below-cost payments from Medicare and Medicaid. Hospitals have maintained their financial status by increasing revenues from other sources, particularly through higher payments from some privately insured patients, to cover losses from public patients and uncompensated care—a practice known as cost shifting.

The impact of payment constraints and the ability to cost shift vary across and within hospital groups. This has led to a growing disparity between hospitals that are performing well and those that are doing poorly. Continued pressure from public and some private payers is likely to widen this gap. Some hospitals will be able to adapt by changing the resources used to produce services or increasing revenues from other sources. Others will not.

Although the last decade has seen dramatic growth in other providers, hospitals will always have an important role in health care delivery. They are the first institutions to adopt state-of-the-art medical technology, the training ground for new physicians, and often the primary point of access to health care services for the uninsured. Therefore, it is important to understand the factors that affect financial condition and hospitals' ability to adapt to changes in these factors, particularly in the face of health care reform.

This chapter provides an overview of trends and patterns in hospital costs and financial condition, as well as shifts in the distribution of payments. Changes in hospital costs are first described. Overall hospital financial performance is then considered in the context of these trends. The ability of hospitals to maintain their current financial status despite increasing costs is discussed in the section on cost shifting. Trends in the use of hospital resources are then presented, with a focus on how hospitals have responded to growing financial pressure. The chapter ends with a look at the distribution of Medicare payments under the prospective payment system (PPS) and the policies that determine this distribution. The implications of those policies, as indicated by PPS payments compared to Medicare costs, are discussed.

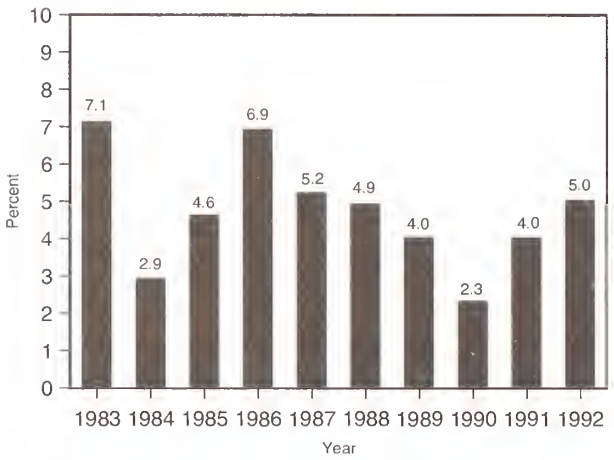
GROWTH IN HOSPITAL COSTS

Hospital cost growth has varied over the past two decades, often in response to cost-containment pressures. This section describes the trend in hospital costs. The distribution of cost increases for different groups of hospitals over the first nine years of PPS is also examined.

Trends in Hospital Costs

The real change in hospital costs per adjusted admission reflects the trend in hospital unit costs, accounting for economywide inflation.[1] Total hospital cost increases have varied widely from year to year (see Figure 2-1). Periods of rapid growth have alternated with periods of slower growth. Real cost per adjusted admission grew by 7.1 percent in 1983—a rate that has not been matched since—followed by a 2.9 percent rise in 1984, the first full year under Medicare's PPS. The 1984 rate was the lowest observed since the voluntary cost controls in the late 1970s. This temporary lull was followed in 1986 by a surge of 6.9 percent.

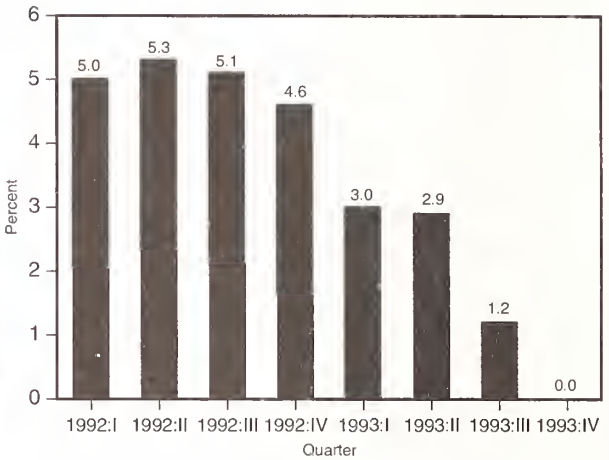
Figure 2-1. Real Change in Hospital Total Expenses Per Adjusted Admission, 1983-1992 (In Percent)



Note: Hospital total expenses deflated by a variant of the consumer price index for all urban consumers (CPI-U-X1).

SOURCE: American Hospital Association Annual Survey of Hospitals.

Figure 2-2. Real Change in Hospital Total Expenses Per Adjusted Admission, by Quarter, 1992 and 1993 (In Percent)



Note: Hospital total expenses deflated by a variant of the consumer price index for all urban consumers (CPI-U-X1). Annual changes calculated by comparison to same quarter of previous year.

SOURCE: American Hospital Assocation National Hospital Panel Survey.

Following that peak, real hospital costs per adjusted admission grew more slowly, falling to 2.3 percent in 1990. Over the next two years, as public debate began to focus on health care costs, hospital spending continued to climb, with a 5.0 percent increase in 1992.

In 1993, hospital cost growth fell sharply. Preliminary data suggest that real costs per adjusted admission increased only by about 2 percent, three percentage points lower than in 1992 (see Figure 2-2).[2] This may indicate a new trend of slower growth or a temporary reaction to discussions of stepped-up cost controls.

Patterns of Growth in Hospital Costs

The aggregate data presented above do not allow separate analysis of inpatient costs or the distribution of cost increases for different groups of hospitals. Medicare data are the only national source of this information. Although Medicare cases differ from others in length of stay and ancillary service use, for example, Medicare data provide relevant insights into cost growth.

In the first year of PPS, fiscal year 1984, hospitals responded to uncertainty about future revenue by restraining cost growth: Medicare operating costs per case grew at less than 2 percent (see Table 2-1). In the second year of PPS, these costs increased by 11 percent. Cost growth averaged about 9 percent from the second through eighth year of PPS. There was a sharp decline to 4.9 percent in the ninth year.

Different types of facilities have different growth rates in their costs. Rural hospitals experienced the same cost increases as urban hospitals in the first eight years of PPS, but more rapid growth in the ninth year.[3] Costs for teaching hospitals rose more slowly than those for non-teaching hospitals over the first eight years. Major teaching hospitals (those with more than 0.25 residents per bed) had slower growth in costs than other teaching hospitals and non-teaching hospitals, especially in the ninth year. Larger facilities, whether in urban or rural areas, saw costs grow faster than smaller ones. The relationship between size and cost increases was more evident shortly after PPS was implemented than in later years.

HOSPITAL FINANCIAL PERFORMANCE

In the 1970s and early 1980s, many private and public insurers paid hospitals on a cost reimbursement basis. Medicare, through PPS, broke the

Table 2-1. Change in PPS Operating Costs Per Case, by Hospital Group, First Nine Years of PPS (In Percent)

Hospital Group	Annual Rate of Change			
	TEFRA to PPS 1	PPS 1 to PPS 8	PPS 8 to PPS 9	TEFRA to PPS 9
All hospitals	1.8%	9.1%	4.9%	7.8%
Urban	1.7	9.0	4.6	7.6
Rural	1.7	9.0	5.8	7.8
Large urban	0.6	8.7	3.9	7.2
Other urban	3.2	9.5	5.8	8.4
Rural referral	1.5	9.6	5.3	8.2
Sole community	1.7	8.2	4.5	7.0
Other rural	1.5	8.5	6.5	7.5
Major teaching	1.2	8.8	4.0	7.4
Other teaching	1.4	8.9	5.0	7.6
Non-teaching	2.0	9.1	4.7	7.8
Disproportionate share:				
Large urban	-0.6	8.6	3.7	7.0
Other urban	3.2	9.6	6.8	8.5
Rural	0.8	9.4	6.7	8.1
Non-disproportionate share	2.5	9.1	4.6	7.9
Urban <100 beds	-0.1	8.5	3.3	6.9
Urban 100-199 beds	0.0	8.5	4.1	7.0
Urban 200-299 beds	1.8	8.5	5.2	7.4
Urban 300-399 beds	1.5	8.8	4.9	7.5
Urban 400-499 beds	3.8	9.2	3.9	8.0
Urban 500+ beds	2.2	9.6	4.4	8.2
Rural <50 beds	2.4	8.2	3.7	7.0
Rural 50-99 beds	0.9	8.1	5.7	7.0
Rural 100-149 beds	1.1	8.9	6.8	7.8
Rural 150-199 beds	1.6	9.3	7.3	8.2
Rural 200+ beds	1.5	9.9	5.4	8.4
Voluntary	1.9	8.9	4.9	7.6
Proprietary	0.4	9.4	3.8	7.7
Urban government	1.8	9.6	4.9	8.2
Rural government	2.0	8.9	6.2	7.8

Note: TEFRA = Tax Equity and Fiscal Responsibility Act of 1982. Data for each PPS year (TEFRA, PPS 1, etc.) correspond to each hospital's cost reporting period beginning in that year. For instance, the TEFRA year includes data from each hospital's cost report beginning during the year in which TEFRA was in effect (Federal fiscal year 1983). Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with PPS 3 and New Jersey beginning with PPS 6. Data are based on cohorts of hospitals with cost reports available in each of two successive years.

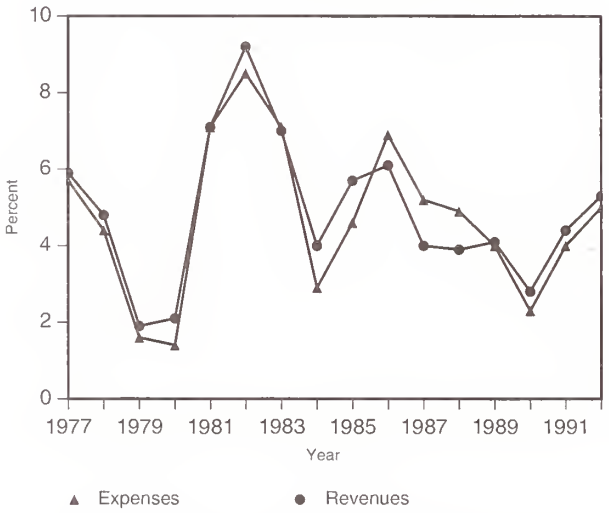
SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

direct link between payments and individual hospital costs. Other payers changed the way they paid for hospital services and initiated numerous measures intended to reduce their expenditures. By the late 1980s and early into the 1990s, hospitals were grappling with more complex payment arrangements and more competitive pressure to attract patients and revenues. Nonetheless, hospital costs have increased in real terms (see Figure 2-3). Further, as hospital cost growth has accelerated, revenue has kept pace.

Hospital Total Margins

Hospital margins indicate the extent to which hospitals generate sufficient revenue from patient

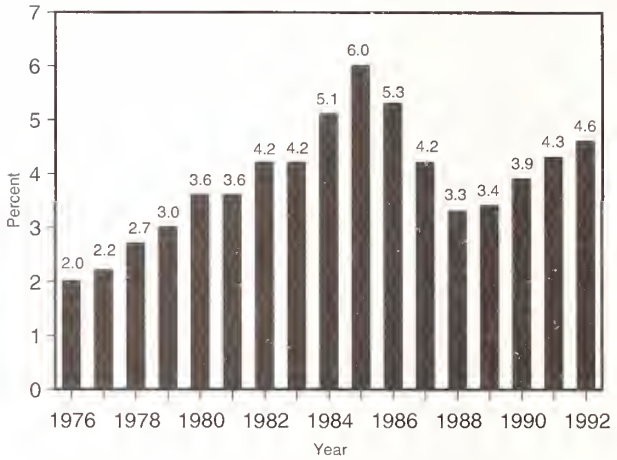
Figure 2-3. Real Change in Hospital Total Expenses and Total Revenues Per Adjusted Admission, 1977-1992 (In Percent)



Note: Hospital total expenses and total revenues deflated by a variant of the consumer price index for all urban consumers (CPI-U-X1).

SOURCE: American Hospital Association Annual Survey of Hospitals.

Figure 2-4. Aggregate Total Margin, 1976-1992 (In Percent)



SOURCE: American Hospital Association Annual Survey of Hospitals.

care and other activities to cover their costs. The aggregate total margin measures the difference between hospitals' total revenues and total expenses as a percentage of revenues. Total expenses include spending for all inpatient and outpatient care as well as for non-patient activities; total revenues include monies from all patients and other sources.[4]

The aggregate total margin climbed steadily from the mid-1970s, after the end of hospital wage and price controls, through the early 1980s, reaching 6.0 percent in 1985 (see Figure 2-4). This peak was due in part to high Medicare PPS operating payments combined with successful efforts by hospitals to restrain cost growth in the first year of PPS. The margin fell to 3.3 percent in 1988, as Medicare and other payers accelerated their efforts to control expenditures. The aggregate total margin was 4.6 percent in 1992, and preliminary data indicate that it increased in 1993.[5]

Total margins vary across and within hospital groups (see Table 2-2). Margins for urban hospitals were higher than those for rural hospitals just after PPS was implemented, but rural hospitals had higher margins than their urban counterparts by the sixth year of PPS. This change parallels policy actions taken to raise Medicare payments to rural hospitals. Urban hospitals in large metropolitan areas have had consistently lower margins than those in other urban areas. In both urban and rural areas, small hospitals have lower margins than larger ones.

In aggregate, major teaching hospitals have lower total margins than other teaching hospitals and non-teaching facilities, though the differences have narrowed in recent years. Some hospitals receive disproportionate share (DSH) payments, which are intended to compensate for the extra costs incurred in caring for large numbers of patients with low incomes. Aggregate total margins for disproportionate share facilities increased in the eighth year of PPS; rural disproportionate share hospitals had higher margins than their urban counterparts and non-disproportionate share facilities.

By the ninth year of PPS, about a quarter of all hospitals had negative total margins, while another quarter had margins exceeding 7.3 percent (see Table 2-3). Total margins vary within each hospital group. Rural hospitals had a higher aggregate total margin than urban hospitals but were more likely to have negative margins. Rural facilities with fewer than 50 beds, which make up almost half of all rural hospitals, had particularly low total margins.

Table 2-2. Total Hospital Margins, by Hospital Group, Selected PPS Years (In Percent)

Hospital Group	PPS 1	Subsequent PPS Years			
		PPS 6	PPS 7	PPS 8	PPS 9
All hospitals	7.2%	3.5%	3.8%	4.3%	4.1%
Urban	7.6	3.4	3.7	4.2	4.0
Rural	5.0	4.0	4.6	5.0	5.1
Large urban	7.3	2.5	2.7	3.3	3.3
Other urban	7.9	4.9	5.3	5.6	5.0
Rural referral	6.9	5.8	6.1	6.2	6.4
Sole community	4.6	3.0	3.9	4.7	4.9
Other rural	3.8	2.8	3.6	4.1	4.0
Major teaching	4.6	1.5	1.9	3.1	3.0
Other teaching	8.2	4.1	4.1	4.5	4.0
Non-teaching	7.3	3.8	4.4	4.7	4.7
Disproportionate share:					
Large urban	6.1	1.6	1.5	2.5	2.5
Other urban	7.5	4.8	5.2	5.9	5.3
Rural	5.2	4.1	5.3	6.9	6.8
Non-disproportionate share	7.8	4.1	4.6	4.6	4.5
Payment adjustments:					
IME and DSH	6.1	2.7	2.5	3.5	3.3
IME only	9.0	4.1	4.7	4.8	4.2
DSH only	7.4	3.4	4.2	5.2	4.8
No IME or DSH	7.2	4.1	4.5	4.5	4.6
Urban <100 beds	2.5	0.3	1.4	1.4	2.1
Urban 100-199 beds	6.8	2.1	2.8	3.2	3.7
Urban 200-299 beds	8.1	3.6	4.2	4.6	4.4
Urban 300-399 beds	8.3	3.9	4.3	4.7	4.2
Urban 400-499 beds	7.8	4.3	3.8	4.3	3.3
Urban 500+ beds	8.6	3.9	3.7	4.7	4.5
Rural <50 beds	2.9	1.5	2.2	2.4	2.4
Rural 50-99 beds	4.5	3.7	4.1	4.4	4.7
Rural 100-149 beds	5.1	4.2	5.1	5.9	6.0
Rural 150-199 beds	5.9	5.3	5.7	6.2	5.8
Rural 200+ beds	7.5	5.5	6.2	6.5	6.5
Voluntary	7.6	3.6	3.8	4.2	3.9
Proprietary	8.6	3.2	4.1	5.5	5.8
Urban government	4.3	3.1	3.3	4.0	3.9
Rural government	4.5	3.1	3.9	4.6	4.9

Note: Data for each PPS year correspond to each hospital's cost reporting period beginning in that year. For instance, PPS 1 includes data from each hospital's cost report beginning during the first year of PPS (Federal fiscal year 1984). Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with PPS 3 and New Jersey beginning with PPS 6. IME = indirect medical education. DSH = disproportionate share.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Those with 100 or more beds, one-fifth of all rural facilities, had total margins well above national averages in the eighth and ninth years. Margins of the larger facilities offset the very low margins of the smallest rural hospitals. Rural referral centers and rural disproportionate share hospitals, many of which are in the large rural group, also had margins well above average.

Table 2-3. Distribution of Total Hospital Margins, by Hospital Group, Ninth Year of PPS (In Percent)

Hospital Group	Percentile			Percent with Negative Total Margins
	25th	Median	75th	
All hospitals	-0.2%	3.4%	7.3%	25.9%
Urban	0.1	3.3	7.1	23.5
Rural	-1.2	3.4	7.5	28.6
Large urban	-0.1	2.9	6.5	25.2
Other urban	0.4	4.0	7.6	21.6
Rural referral	3.1	6.7	9.3	11.9
Sole community	-1.6	3.8	8.0	29.2
Other rural	-1.6	2.7	6.7	31.0
Major teaching	0.1	2.5	5.1	23.1
Other teaching	0.3	3.4	7.0	22.5
Non-teaching	-0.5	3.4	7.5	26.6
Disproportionate share:				
Large urban	-1.0	2.2	5.9	30.0
Other urban	1.2	4.6	8.2	18.4
Rural	0.7	5.4	9.2	22.0
Non-disproportionate share	-0.5	3.2	7.0	27.0
Payment adjustments:				
IME and DSH	-0.1	2.8	6.3	25.4
IME only	0.9	3.9	6.8	18.7
DSH only	0.5	4.5	8.5	23.0
No IME or DSH	-1.0	3.1	7.1	28.1
Urban <100 beds	-2.4	1.6	5.4	35.7
Urban 100-199 beds	0.5	3.4	7.5	21.9
Urban 200-299 beds	0.9	4.0	7.3	19.1
Urban 300-399 beds	1.2	4.3	8.1	17.6
Urban 400-499 beds	0.3	3.6	6.7	20.7
Urban 500+ beds	1.4	4.8	7.8	13.3
Rural <50 beds	-3.6	1.6	6.1	39.2
Rural 50-99 beds	0.6	3.9	7.9	21.1
Rural 100-149 beds	2.1	5.4	9.3	13.5
Rural 150-199 beds	3.7	6.1	8.8	11.4
Rural 200+ beds	3.2	7.1	9.3	10.1
Voluntary	0.1	3.4	6.8	23.7
Proprietary	-0.9	4.8	10.8	27.8
Urban government	0.1	3.3	7.2	23.2
Rural government	-2.1	2.9	7.6	31.9

Note: Excludes hospitals in Maryland. IME = indirect medical education. DSH = disproportionate share.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

As a group, major teaching hospitals historically have had total margins lower than those of other teaching and non-teaching hospitals. Many of these facilities are located in inner cities and treat a large population of poor patients and relatively few who are privately insured. These factors could contribute to their higher costs and lower revenues. Although both groups of teaching hospitals have comparatively low aggregate total margins, hospitals in these

groups are less likely than non-teaching facilities to have negative margins.

Hospital Cost Shifting

As discussed above, hospitals have maintained reasonably stable total margins despite attempts by some payers, notably Medicare and Medicaid, to reduce their expenditure growth by controlling their payment rates. Moreover, this has occurred while hospital cost growth has continued. Consequently, hospitals experience financial losses from government programs as costs exceed payments. Hospitals also incur losses when providing uncompensated care to uninsured and underinsured patients.

Hospitals have made up for these losses by obtaining revenues in excess of costs (gains) from private payers. This action—increasing revenues from some privately insured patients to cover losses from public patients and uncompensated care—is known as cost shifting. Hospitals also use gains from non-patient care activities to help cover their losses.

In 1992, total gains from all private payer and non-patient related activity were 15.1 percent of total hospital costs. These gains offset losses of 10.5 percent from uncompensated care, Medicare, and Medicaid (see Table 2-4). Uncompensated care losses were almost 5 percent of aggregate hospital total costs. These losses were substantially higher for some hospital groups, particularly urban government hospitals and public major teaching hospitals.

The Medicaid program has traditionally paid rates that are less than the costs hospitals incur in treating its patients. Aggregate Medicaid costs are only 13 percent of total costs, but they can be substantially higher for some hospitals, particularly those in large urban areas. A large share of Medicaid patients can make it harder for a hospital to cover its Medicaid losses because the hospital has fewer privately insured patients. Medicaid's contribution to hospital shortfalls, however, declined in 1992 because the program substantially increased its DSH add-on payments to hospitals. These payments rose from less than $1 billion in fiscal year 1989 to more than $17 billion in fiscal year 1992.[6] Although the higher payments were partially offset by provider-specific taxes, they substantially increased the flow of Medicaid revenue to the hospital industry.

A hospital's ability to cost shift is related to its share of privately insured patients and to the payments it receives from private payers (reflected in the average payment to cost ratio in Table 2-4). In 1992, the private payer share of total costs in large urban hospitals was higher than that in rural hospitals, but payments from private payers were only 27 percent above costs, compared with 38 percent for rural facilities. Consequently, the overall net gain for hospitals in large urban areas was substantially less than that for rural facilities.

Public major teaching hospitals had lower-than-average losses from Medicare in 1992, but substantial costs associated with uncompensated care. These hospitals also had a low private payer share of total costs and a comparatively low private payer payment to cost ratio. This situation signifies the relatively weak capacity of public major teaching hospitals to cost shift, leaving them with the lowest total gains of any hospital group.

Disproportionate share hospitals in large urban areas had smaller gains from private pay patients than did other disproportionate share hospitals, resulting in smaller total gains. Although these hospitals had greater uncompensated care costs, the government subsidies they received offset the greater amount of uncompensated care they provided. As a result, the total loss burden from these costs was comparable to other disproportionate share hospitals.

Non-patient revenue as a proportion of total hospital revenue grew from 4.0 percent in 1983 to 5.7 percent in 1992. These funds come from many sources, among them philanthropy; government grants; interest on endowments; and services and concessions such as physician office buildings, parking lots, and gift shops. Non-patient revenue may, in some cases, compensate for a hospital's apparently weak ability to increase revenues from private payers. For some hospital groups, absence of non-patient revenue would have resulted in overall losses instead of gains in 1992.

HOSPITAL RESOURCES

Cost growth can be attributed to increased service volume, changes in the mix and use of inputs

Table 2-4. Gains or Losses by Payer, by Hospital Group, 1992

Hospital Group	Aggregate Total Gain	Gains or Losses as a Percentage of Total Costs						Private Payers	
		Medicare[a]	Medicaid[a]	Other Government Payers and Subsidies[b]	Uncompensated Care[b]	Private	Non-Patient	Share of Total Costs	Payment to Cost Ratio
All PPS hospitals	4.8%	-4.4%	-1.2%	0.2%	-4.9%	11.8%	3.3%	37.6%	1.31
Large urban	3.7	-3.9	-1.5	0.2	-4.9	10.3	3.5	38.3	1.27
Other urban	6.3	-5.1	-0.9	0.1	-4.9	14.0	3.2	37.5	1.37
Rural	6.1	-4.7	-0.8	0.4	-4.8	12.9	3.0	34.2	1.38
Major teaching, public	2.8	-1.2	1.5	-0.1	-7.3	5.6	4.3	22.1	1.25
Major teaching, non-public	3.6	-2.9	-1.3	0.1	-4.8	8.6	4.0	38.8	1.22
Other teaching	5.1	-4.5	-1.0	0.1	-4.9	12.0	3.4	39.0	1.31
Non-teaching	5.3	-5.4	-1.6	0.3	-4.6	13.9	2.8	37.9	1.37
Disproportionate share:									
Large urban	2.9	-2.9	-1.3	0.2	-5.7	9.0	3.6	33.0	1.27
Other urban	6.7	-4.4	-0.5	0.0	-5.6	13.9	3.4	35.6	1.39
Rural	8.5	-4.0	0.6	0.2	-6.2	14.7	3.1	31.1	1.47
Non-disproportionate share	5.0	-5.5	-1.3	0.2	-4.1	12.6	3.1	41.2	1.31
Voluntary	4.7	-4.4	-1.5	0.1	-4.6	11.6	3.5	39.4	1.29
Proprietary	6.3	-6.2	-2.1	0.1	-3.9	17.4	1.0	40.6	1.43
Urban government	4.3	-2.8	0.9	0.3	-6.9	8.8	4.0	26.5	1.33
Rural government	6.1	-4.4	-0.2	1.0	-5.0	11.5	3.2	31.8	1.36

Note: Due to reporting inconsistencies related to Medicaid disproportionate share hospital payments and provider-specific taxes, there are significant margins of error for the numbers related to all payers in 1992.

[a] Medicare and Medicaid costs equal all costs, both inpatient and outpatient, attributed by hospitals to these programs' patients regardless of whether the costs are allowable (and therefore reimbursable) by the programs.

[b] Operating subsidies from state and local governments were considered as payments for uncompensated care, up to the level of each hospital's uncompensated care costs. Additional subsidies above this level were counted as separate revenue.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

to produce services, and higher input prices. Trends in the volume of care, measured by inpatient and outpatient utilization and hospital capacity to provide inpatient care, are described first in this section. Changes in employment and inputs other than capital are then discussed, followed by an overview of hospital capital costs and the industry's use of tax-exempt financing.

Utilization

Admission rates and length of stay have declined over the last decade, especially after the implementation of PPS. Likewise, the number of hospital beds has dropped since 1984 at an average rate of 1.1 percent per year (see Table 2-5). Because this reduction has not matched the lower demand for inpatient care, occupancy rates fell from 72.2 percent in 1983 to 61.4 percent in 1993.

The decrease in inpatient utilization has been accompanied by tremendous growth in the delivery of hospital outpatient services. This growth is not merely a shift of settings, but an overall increase in the number of services provided. Several factors created incentives and opportunities for these trends, including relatively favorable payment methods, greater utilization review of inpatient procedures, and advances in technology.

The changes in the proportion of revenues hospitals receive from inpatient and outpatient services

Table 2-5. Change in Average Hospital Occupancy Rate and Number of Beds, 1980-1993

Year	Occupancy Rate	Percent Change	Number of Beds*	Percent Change
1980	75.9%	1.9%	970,500	1.2%
1981	75.8	-0.1	986,900	1.7
1982	74.6	-1.6	997,700	1.1
1983	72.2	-3.2	1,003,700	0.6
1984	66.6	-7.8	992,600	-1.1
1985	63.6	-4.5	974,600	-1.8
1986	63.4	-0.4	963,100	-1.2
1987	64.1	1.1	954,500	-0.9
1988	64.5	0.6	942,300	-1.3
1989	64.9	0.6	930,100	-1.3
1990	64.5	-0.6	921,400	-0.9
1991	63.5	-1.6	911,800	-1.0
1992	62.1	-2.2	907,700	-0.5
1993	61.4	-1.1	901,700	-0.7
Averages				
1980-1983	74.6	-0.8	989,700	1.1
1984-1993	63.8	-1.6	936,900	-1.1

* Rounded to nearest 100.

SOURCE: American Hospital Association National Hospital Panel Survey.

reflect the combined impact of the decline in inpatient utilization, the shift of many procedures to the hospital outpatient setting, and the use of the outpatient setting for new procedures (see Table 2-6). In 1984, inpatient revenues accounted for 81.3 percent of total hospital revenues; by 1993, this share had dropped to 68.9 percent. Conversely, outpatient revenues grew from 14.4 percent to 26.2 percent of total revenues over the same period.

Outpatient revenue per visit has grown rapidly as well, at an average annual rate of 10.3 percent between 1984 and 1993. This compares with 8.4 percent for inpatient revenue per admission. The difference in these rates may reflect the increasing complexity of outpatient procedures, as well as rigorous controls on inpatient payments compared with outpatient payments.

Even though outpatient visits increased about 6.5 percent in 1992 and again in 1993, evidence indicates a slowdown in the growth of outpatient revenue per visit. After rising 8.6 percent in 1992, growth slowed to 3.8 percent. This led to a drop in aggregate outpatient revenue growth from 15.6 percent in 1992 to 10.6 percent in 1993.

Changes in Hospital Employment

Labor accounts for a major proportion of hospital costs. (In 1993, labor expenses were over half of total costs.) When hospitals face pressures to reduce costs, they target labor. This is precisely what happened in 1983 through 1985, in response to PPS. Hospitals cut back personnel and wage growth slowed dramatically (see Table 2-7). Recent data indicate that this may be happening again.

Starting in 1985, hospital employment growth climbed steadily, peaking at 3.3 percent in 1990 and 1991. Increases in part-time employees fueled much of this growth. The increase in part-time employment was, on average, 2.7 percentage points higher than that of full-time employment from 1988 to 1990. This trend likely reflected hospitals' needs for flexibility during a period of changing demands in the health care market. As with many sectors in the economy, the use of part-time employees allows hospitals to adjust staff to fluctuating demand.

In 1991, however, the number of full-time workers rose by 3.9 percent while the number of part-time employees grew by only 0.2 percent, increasing overall employment by 3.3 percent. In 1992, full-time and part-time employment both went up at the same rate, 2.3 percent, the slowest increase for full-time personnel and overall employment since 1986 and the most significant decline in those rates since 1984. Preliminary data indicate that in 1993 full-time equivalent (FTE) employees grew by 0.7 percent and adjusted admissions increased by 2.0 percent. (By contrast, in 1992 full-time equivalent employees grew by 1.6 percent and adjusted admissions increased by 1.1 percent.)[7] Hospitals seem to have been more conservative in their hiring.

Skill-mix levels in hospitals have remained basically unchanged since 1988. The share of registered nurses in the hospital nursing work force increased from 57 percent to 65 percent from 1983 to 1987. This proportion has not changed significantly since then. Although employment of more highly skilled, better-paid workers explains some of the rise in hospital labor costs in the early 1980s, it has not been a significant factor since 1987.

Growth in total hospital labor expenses per FTE has declined in recent years, but it is still higher

Table 2-6. Change in Hospital Revenue and Proportion of Revenue, by Source, 1980-1993 (In Percent)

Year	Change in Revenue		Proportion of Revenue		
	Inpatient Revenue Per Admission	Outpatient Revenue Per Visit	Inpatient	Outpatient	Other
1980	14.5%	15.8%	83.2%	12.5%	4.3%
1981	17.3	19.2	82.7	12.7	4.5
1982	16.2	16.8	82.7	12.9	4.4
1983	10.4	11.5	82.4	13.4	4.2
1984	8.6	12.4	81.3	14.4	4.3
1985	8.9	13.2	79.3	16.1	4.6
1986	8.5	8.3	78.0	17.5	4.5
1987	8.9	10.7	76.8	18.6	4.6
1988	8.5	11.4	75.2	20.0	4.8
1989	9.4	11.5	74.0	21.1	4.9
1990	9.2	11.7	72.5	22.5	5.0
1991	9.3	12.0	71.1	24.0	4.8
1992	8.2	8.6	69.8	25.4	4.9
1993	4.9	3.8	68.9	26.2	5.0
Averages					
1980-1983	14.6	15.8			
1984-1993	8.4	10.3			

SOURCE: American Hospital Association National Hospital Panel Survey.

than it was just after PPS went into effect (see Table 2-8).[8] From 1985 to 1987, average annual increases in total compensation per FTE were very low, at 4.4 percent, but growth since then has averaged 6.4 percent. An acceleration in the growth in benefits was the primary cause of higher total compensation; average annual increases in benefits per FTE from 1988 to 1992 were more than twice those during the 1985 to 1987 period.

These data reflect changes in the occupational mix of hospital employment as well as changes in compensation. The employment cost index (ECI)

Table 2-7. Change in Hospital Employment, 1981-1992 (In Percent)

Year	Full-Time Personnel	Part-Time Personnel	Unadjusted FTEs	Average Skill Mix
1981	3.6%	10.4%	4.5%	-0.1%
1982	1.9	3.5	2.2	0.2
1983	-0.2	0.1	-0.2	0.6
1984	-2.3	-4.2	-2.5	0.7
1985	-1.3	1.9	-0.8	0.4
1986	1.0	0.7	1.0	1.1
1987	2.8	3.1	2.9	0.1
1988	2.4	5.3	2.8	-0.2
1989	2.5	5.7	3.0	0.0
1990	3.0	5.5	3.3	-0.1
1991	3.9	0.2	3.3	0.1
1992	2.3	2.3	2.3	—
Averages				
1981-1983	1.8	4.6	2.1	0.2
1984-1992	1.6	2.2	1.7	0.3*

Note: FTE = full-time equivalent.

* Average annual change for 1984-1991.

SOURCE: ProPAC analysis of American Hospital Association Annual Survey of Hospitals.

Table 2-8. Change in Labor Expenses Per Full-Time Equivalent Employee, 1984-1992 (In Percent)

Year	Salary Expenses	Benefit Expenses	Total Compensation
1984	6.8%	10.8%	7.5%
1985	4.1	6.5	4.5
1986	5.0	2.0	4.5
1987	4.4	2.7	4.1
1988	6.6	7.8	6.9
1989	4.4	10.9	5.6
1990	6.7	9.5	7.2
1991	5.0	11.8	6.4
1992	5.0	9.8	6.0

SOURCE: American Hospital Association Annual Survey of Hospitals.

measures the change in actual compensation (wages and benefits) in the overall economy and in the hospital industry. Changes in the ECI are not sensitive to changes in occupational mix. According to the ECI, increases in labor compensation in hospitals and in the overall economy peaked in 1990, at 7.0 percent and 5.0 percent, respectively. Since then, growth rates have decreased and the differential has diminished. In 1993, growth was actually higher in the overall economy, at 3.5 percent, than in the hospital industry, at 3.3 percent. This may indicate that hospitals are keeping a tighter control on wages because of the constrained fiscal environment and intense focus on health care industry expenditures.

Costs of Services and Supplies

In 1993, about 38 percent of total hospital spending was for services and supplies. These include items ranging from malpractice premiums and pharmaceuticals to paper goods and food, as well as payments for contract labor such as temporary nurses. In every year since the implementation of PPS, aggregate expenses for these items have grown faster than those for labor. This is attributable to the early decline and subsequent modest growth in hospital employment, rather than sustained inflation in important categories of services and supplies. From 1984 through 1987, the average annual rate of increase in aggregate expenses for these items was more than three percentage points higher than that for labor. From 1987 through 1991, the difference was a more modest 0.8 percentage points per year, but in 1992 the difference jumped to 1.4 percentage points. In 1993, however, these two categories of expenses grew at approximately equal rates.

Capital Costs

In 1993, capital depreciation and interest expense were about 8.2 percent of total hospital costs, or 8.9 percent of total operating costs (see Table 2-9). This was the first year since 1987 that these ratios had not declined. From 1980 to 1987, capital costs grew substantially faster than operating costs, thus contributing more to total costs.

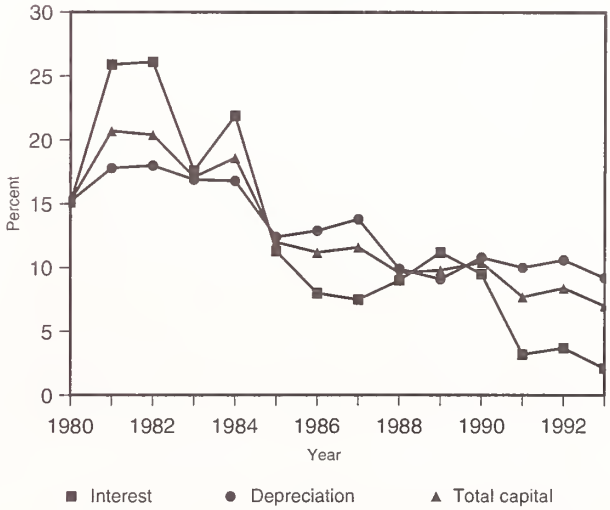
Table 2-9. Change in Capital Costs as a Proportion of Total Hospital and Operating Costs, 1980-1993

Year	Capital/ Total Cost	Percent Change	Capital/ Operating Cost	Percent Change
1980	6.2%	-1.5%	6.6%	-1.6%
1981	6.3	1.4	6.7	1.5
1982	6.5	4.2	7.0	4.5
1983	6.9	6.3	7.5	6.8
1984	7.9	13.1	8.5	14.2
1985	8.3	5.3	9.0	5.8
1986	8.4	2.0	9.2	2.2
1987	8.5	1.0	9.3	1.1
1988	8.5	-0.5	9.3	-0.6
1989	8.5	-0.1	9.3	-0.1
1990	8.4	-0.7	9.2	-0.8
1991	8.3	-2.0	9.0	-2.1
1992	8.2	-0.9	8.9	-1.0
1993	8.2	0.0	8.9	0.0

SOURCE: ProPAC analysis of data from the American Hospital Association National Hospital Panel Survey.

Capital cost growth fell to about 7 percent between 1992 and 1993 (see Figure 2-5). This slowdown resulted from continuing declines in interest rates, with interest expense growth slackening to 2.1 percent. Depreciation expense—approximately 71 percent of total capital costs—rose 9.2 percent.

Figure 2-5. Change in Capital Costs: Interest, Depreciation, and Total Capital, 1980-1993 (In Percent)



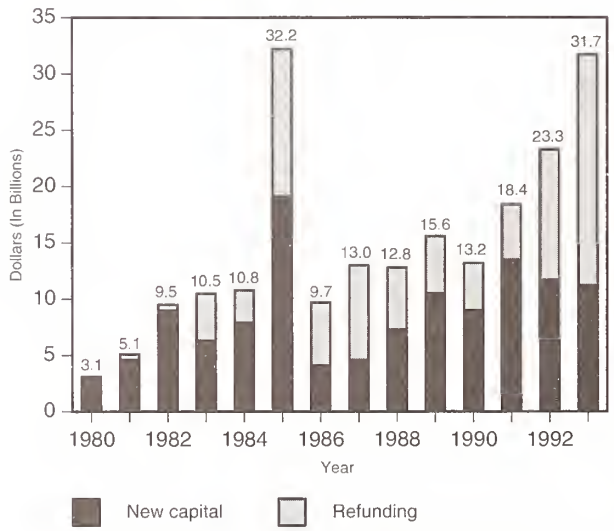
SOURCE: American Hospital Association National Hospital Panel Survey.

Tax-Exempt Debt Financing and Access to Capital Markets

Borrowing is a critical part of hospital capital financing. Total tax-exempt health care and nursing home bond volume increased 36 percent from 1992 to 1993, to approximately $32 billion (see Figure 2-6). General acute care hospitals accounted for about 84 percent of this total. As interest rates declined in the late 1980s and hit new lows in the early 1990s, the portion of bond volume related to refinancing prior issues has grown dramatically. In 1993, only 35 percent of new issues were strictly for new capital, a 13 percentage point drop from 1992. Bond issues for refunding or refunding plus new capital accounted for 65 percent of new issues in 1993, or $20.5 billion.

Hospitals can improve their prospects for access to bond financing by arranging credit enhancements, such as bond insurance or a bank letter of credit. In recent years, a larger portion of hospital bonds has been backed by some form of credit enhancement. In 1993, about 53 percent of bond volume was backed in this fashion, up slightly from 48 percent in 1992. However, only 3 percent of bonds were backed by some form of credit enhancement in 1980, indicating much greater difficulty in accessing debt markets today.

Figure 2-6. Health Care and Nursing Home Tax-Exempt Municipal Bond Volume, 1980-1993 (In Billions)



SOURCE: Information for 1980 to1991 from Securities Data Co., Inc., and for 1992 and 1993 from *The Bond Buyer.*

Hospital access to capital markets depends on various factors, including the credit rating of the facility. A higher credit rating is usually associated with a lower interest rate and greater availability of debt financing. A hospital's credit rating reflects outside perceptions of its ability to repay a loan. Credit ratings are influenced by many factors, among them the strength of the industry, the hospital's market position and operating efficiency, the adequacy of hospital cash flow, the state regulatory environment, and the overall economy. Ratings are set by major credit rating agencies like Moody's and Standard & Poor's. In 1993, Standard & Poor's downgraded 73 tax-exempt hospital bonds totaling $2.5 billion of debt and upgraded 34 issues worth $1.2 billion of debt. However, excluding two events that directly affected a large number of bonds (the downgrading of the Industrial Indemnity Company and hospital deregulation in New Jersey), the rating changes were nearly balanced, with 35 downgrades on $1.3 billion of debt and 31 upgrades on $1.1 billion of debt. This adjusted measure represents a 1.1 to 1 ratio of the number of downgrades to upgrades, a slight improvement over the 1.2 to 1 ratio of 1992.

For hospitals that receive extremely low bond ratings, capital can be very difficult to obtain. Some hospitals choose not to be rated if they know their rating will be poor; instead, they obtain capital through unrated bonds. Investors have been more willing in recent years to buy these bonds as they look for higher returns in markets with low interest rates. In 1991 and 1992, a total of $2.4 billion in capital was raised through unrated bonds.

MEDICARE PAYMENTS TO HOSPITALS

Medicare payments account for a substantial share of hospital revenues; therefore, they have a major impact on hospitals' financial condition. This section explains the key features of the prospective payment system and presents information on trends in Medicare inpatient operating payments. A discussion of the effects of Medicare payment policy follows, along with an examination of Medicare payment for outpatient services. The section concludes with information on PPS operating margins.

Medicare Payments for Inpatient Operating Services

Under PPS, the basis of payment for each hospital discharge is the national standardized payment amount, which represents the average payment for the typical case. The standardized amount differs according to the hospital's classification as large urban (in a metropolitan statistical area, or MSA, with a population of more than one million); other urban (in an MSA with a population of one million or fewer); or rural (outside of any MSA). Cases are categorized by diagnosis-related groups (DRGs), which are groups of medically similar cases that require comparable resource use by hospitals. Each DRG is assigned a weight, based on its cost relative to the national average.

The standardized amount is adjusted by a wage index for each MSA and for the rural areas in each state to account for differences in hospital wage rates across areas.[9] The wage index measures the relative level of hourly wages for hospital workers in the area compared with the national average for hospital workers. The adjusted standardized amount is then multiplied by the relative weight for each DRG to obtain the basic DRG payment for that type of case.

Basic DRG payments thus reflect the hospital's location, local wage rate, and mix of Medicare cases. These factors partly explain why PPS payments are higher for hospitals in urban areas than for those in rural areas. The standardized payment amounts for urban hospitals are higher because of historical and continuing differences in costs per discharge.[10] Moreover, urban hospitals tend not only to be located in labor market areas with higher wage rates but also to treat a more complex and costly mix of Medicare patients.

In addition to the basic DRG rates, hospitals receive extra payments under PPS for cases with unusually long stays or extraordinarily high costs (outliers). Payments are also adjusted for hospitals that operate graduate medical education programs or serve a disproportionate share of patients with low incomes. These features further increase the amounts paid to urban hospitals compared with rural facilities. Hospitals in urban areas are much more likely to have outlier cases, and most teaching and disproportionate share hospitals are in these areas.

Distribution of PPS Operating Payments—Hospitals will receive an estimated $66 billion in PPS operating payments in fiscal year 1994.[11] The Medicare Hospital Insurance (Part A) Trust Fund will pay about 90 percent of this amount; beneficiary coinsurance will account for the rest.

Hospitals in urban areas (56 percent of all PPS hospitals) discharge 80 percent of PPS cases; in fiscal year 1994, they will receive an estimated 87 percent of PPS operating payments (see Table 2-10). By contrast, rural hospitals (44 percent of all PPS hospitals) account for only 20 percent of PPS discharges and will receive an estimated 13 percent of PPS operating payments in fiscal year 1994. The largest hospitals in urban areas receive a particularly high proportion of payments. Urban hospitals with 400 or more beds represent only 7 percent of all PPS hospitals and 24 percent of PPS discharges, but they will receive 32 percent of PPS payments.

Across hospital groups, variations in the share of total PPS operating payments reflect differences in Medicare volume and other factors that influence each hospital's average payment per discharge. As noted earlier, these include hospital and area characteristics, such as local wage rates and the mix of cases treated. Other factors triggering additional payments under PPS, such as the number of outlier cases, the operation of a graduate medical education program, or the treatment of a disproportionate share of patients with low incomes, also influence the distribution of PPS payments. The Congress included all these factors in the payment system to ensure that PPS payments would compensate hospitals fairly for appropriate differences in the cost of treating Medicare patients, as well as to accomplish broader policy objectives.

Outlier Payments—Outlier payments are intended to protect hospitals from the risk of financial losses associated with cases with unusually long stays or exceptionally high costs.[12] They also are designed to mitigate the incentive to avoid or inappropriately treat patients who are likely to become costly. In fiscal year 1994, outlier payments are expected to account for 4.4 percent of total PPS operating payments, or about $2.9 billion (see Table 2-11).

Outlier payments are funded by a 5.4 percent reduction in the standardized payment amounts for

Table 2-10. Distribution of PPS Hospitals and Discharges and Estimated Fiscal Year 1994 PPS Operating Payments, by Hospital Group

Hospital Group	Number of PPS Hospitals	Percent of Hospitals	Percent of Discharges	Percent of PPS Operating Payments			
				Total	Outlier	IME	DSH
All hospitals	5,251	100%	100%	100%	100%	100%	100%
Urban	2,932	56	80	87	95	99	95
Rural	2,319	44	20	13	5	1	5
Large urban	1,609	31	45	53	60	74	61
Other urban	1,323	25	35	34	34	24	34
Rural referral	246	5	7	5	3	1	3
Sole community	576	11	3	2	*	*	1
Other rural	1,497	29	10	6	2	*	1
Major teaching	229	4	10	17	19	63	34
Other teaching	801	15	32	34	38	37	33
Non-teaching	4,221	80	59	49	43	0	34
Disproportionate share:							
Large urban	727	14	21	28	30	52	61
Other urban	621	12	19	19	19	18	34
Rural	458	9	5	4	2	1	5
Non-disproportionate share	3,445	66	55	49	50	29	0
Urban <100 beds	735	14	5	4	6	*	*
Urban 100-199 beds	883	17	16	14	12	4	17
Urban 200-299 beds	603	11	20	20	20	11	18
Urban 300-399 beds	345	7	15	17	18	17	19
Urban 400-499 beds	175	3	10	12	14	20	14
Urban 500+ beds	191	4	14	20	24	46	27
Rural <50 beds	1,179	22	4	2	*	*	*
Rural 50-99 beds	708	13	6	4	1	*	*
Rural 100-149 beds	221	4	4	3	1	*	1
Rural 150-199 beds	105	2	2	2	1	*	1
Rural 200+ beds	106	2	4	3	2	1	2
New England	225	4	6	6	5	11	3
Middle Atlantic	538	10	17	20	29	33	23
South Atlantic	749	14	17	16	15	11	19
East North Central	804	15	18	17	13	21	11
East South Central	459	9	8	7	6	3	8
West North Central	742	14	8	7	5	7	3
West South Central	740	14	10	9	9	5	12
Mountain	348	7	4	4	3	2	2
Pacific	646	12	11	13	14	8	18
Voluntary	3,006	57	74	76	79	80	66
Proprietary	751	14	12	11	11	2	10
Urban government	434	8	8	10	9	18	22
Rural government	1,024	20	6	4	1	*	2

Note: PPS payments estimated using PPS rules in effect as of January 1, 1994. Excludes hospitals in Maryland. Within hospital groups, percentages may not add to 100 due to rounding. IME = indirect medical education. DSH = disproportionate share.

* Less than 0.5 percent.

SOURCE: ProPAC estimates based on ProPAC PPS payment model and fiscal year 1992 MedPAR file data from the Health Care Financing Administration.

Table 2-11. Distribution of Estimated Fiscal Year 1994 PPS Operating Payments, by Hospital Group and Payment Type (In Percent)

Hospital Group	PPS Operating Payments			
	Basic DRG	Outlier	IME	DSH
All hospitals	84.8%	4.4%	5.7%	5.1%
Urban	83.1	4.8	6.5	5.6
Rural	95.8	1.8	0.6	1.8
Large urban	81.1	5.0	8.0	5.9
Other urban	86.3	4.5	4.1	5.1
Rural referral	93.5	2.5	1.4	2.6
Sole community	98.0	0.7	*	1.3
Other rural	97.1	1.6	*	1.3
Major teaching	63.7	4.9	21.3	10.1
Other teaching	84.2	4.9	6.2	4.8
Non-teaching	92.5	4.0	0.0	3.5
Disproportionate share:				
Large urban	73.5	4.7	10.7	11.1
Other urban	81.4	4.4	5.3	8.9
Rural	90.5	2.1	1.0	6.4
Non-disproportionate share	92.1	4.5	3.4	0.0
Urban <100 beds	91.8	7.2	0.5	0.5
Urban 100-199 beds	88.8	3.7	1.6	6.0
Urban 200-299 beds	87.9	4.4	3.2	4.5
Urban 300-399 beds	83.8	4.7	5.7	5.8
Urban 400-499 beds	79.4	5.3	9.5	5.8
Urban 500+ beds	74.2	5.4	13.4	7.0
Rural <50 beds	98.8	0.7	*	0.5
Rural 50-99 beds	98.1	1.2	*	0.6
Rural 100-149 beds	95.4	2.0	0.2	2.4
Rural 150-199 beds	95.1	2.4	0.2	2.3
Rural 200+ beds	91.8	2.9	2.1	3.2
New England	84.0	3.8	9.7	2.6
Middle Atlantic	78.3	6.4	9.4	5.9
South Atlantic	85.9	4.2	3.8	6.1
East North Central	86.5	3.3	7.0	3.2
East South Central	86.8	4.2	2.6	6.4
West North Central	89.4	3.1	5.3	2.2
West South Central	86.4	4.3	3.0	6.3
Mountain	90.9	3.6	3.3	2.3
Pacific	84.7	4.7	3.6	7.1
Voluntary	85.0	4.6	6.0	4.4
Proprietary	89.6	4.5	1.1	4.7
Urban government	73.3	4.2	10.7	11.8
Rural government	96.2	1.4	0.1	2.3

Note: PPS payments estimated using PPS rules in effect as of January 1, 1994. Excludes hospitals in Maryland. Rows may not add to 100 due to rounding. DRG = diagnosis-related group. IME = indirect medical education. DSH = disproportionate share.

* Less than 0.5 percent.

SOURCE: ProPAC estimates based on ProPAC PPS payment model and fiscal year 1992 MedPAR file data from the Health Care Financing Administration.

urban hospitals and a 2.2 percent reduction for rural hospitals.[13] These reductions represent the Health Care Financing Administration's (HCFA) estimates of the approximate shares of total DRG plus outlier payments attributable to outlier payments in urban and rural hospitals, respectively, in fiscal year 1994. Outlier payments are made, however, according to the actual incidence of outlier cases, regardless of where they occur. The outlier policy's net effect on a given hospital's PPS revenue depends on whether the hospital's proportion of outlier payments is more or less than the reduction in its standardized payment amount.

Outlier payments are not evenly distributed across hospitals, because some facilities are more likely to treat patients that require an extraordinary amount of resources. For example, both urban hospitals and teaching hospitals account for larger shares of outlier payments than of total PPS payments. This is also true for hospitals in the Middle Atlantic region. Despite this flow of additional monies, hospitals having a high proportion of outlier payments in any given year are more likely than others to incur losses under PPS.

Indirect Medical Education and Disproportionate Share Payments—In fiscal year 1994, indirect medical education (IME) and DSH payments are expected to account for 10.8 percent of all PPS operating payments, or roughly $7.1 billion.

Compared with other hospitals, teaching hospitals have higher costs per case. This may be because they offer a wider range of services and technologies, treat patients who are more severely ill, provide more diagnostic and therapeutic services to certain types of patients, or all three. Furthermore, they tend to use a greater number and a more expensive mix of services per case. Accordingly, the IME adjustment is intended to recognize these indirect costs of operating approved graduate medical education programs.

PPS accounts for these indirect costs by applying a hospital-specific percentage adjustment to each teaching hospital's total DRG plus outlier payments. The IME adjustment varies according to the intensity of each hospital's graduate medical education activities (as measured by the ratio of residents per bed). In fiscal year 1994, IME payments are expected to account for 5.7 percent of total PPS operating payments, or about $3.8 billion.

The DSH adjustment is designed to compensate hospitals that treat large proportions of patients with low incomes. Such hospitals are thought to have higher than average costs for a variety of reasons, including their location and the characteristics of the patients they treat. DSH payments are projected to contribute 5.1 percent of total PPS operating payments, or about $3.4 billion, in fiscal year 1994.

Almost all IME and DSH payments go to hospitals located in urban areas. These payments also account for a larger share of total PPS revenues in urban hospitals than in rural facilities. In general, larger hospitals—especially the biggest ones— also receive more of their PPS revenues from IME and DSH payments than do smaller facilities.

IME and DSH payments are also distributed unevenly across geographic areas. Hospitals in the Middle Atlantic and East North Central regions combined receive more than half of all IME payments. DSH payments go predominately to hospitals in the Middle Atlantic, South Atlantic, and Pacific regions.

There is substantial overlap between the hospitals receiving IME and DSH payments. Teaching hospitals account for 67 percent of all DSH payments, and disproportionate share hospitals receive 71 percent of all IME payments. As a result, IME and DSH payments are a major source of revenue for some hospitals, but are much less important for others. For example, major teaching hospitals rely on these adjustments for almost one-third of their PPS operating revenue. By contrast, non-teaching hospitals receive less than one-twentieth of their PPS operating payments through the IME and DSH adjustments.

Effects of Payment Policy and Other Changes—Before the implementation of PPS, hospitals were paid on the basis of the allowable costs they incurred in providing services to Medicare beneficiaries. Under this method, payments were unevenly distributed because of differences in hospital costliness. Teaching hospitals, for instance, historically received a larger share of Medicare

payments than other facilities because they generally were large and had high costs per case.

By paying hospitals a fixed rate for each DRG, PPS removed the direct link between the costs incurred by an individual hospital and the Medicare payments it received. Instead, there are adjustments designed to recognize the impact of factors that affect hospital costs.

Implementation of PPS and hospitals' responses led to major changes in the distribution of Medicare payments and operating costs per case. The Congress enacted policy changes to mitigate perceived inequities. For example, it mandated separate updates to the rural and urban standardized payment amounts each year beginning in fiscal year 1988. These policies have affected the level and distribution of PPS payments among hospitals, generally as the Congress intended.

Other changes in the distribution of payments have occurred when specific elements of the payment system have been updated to reflect new data. The area wage index, the DRG classification system and weights, and the outlier thresholds all are subject to periodic updating.

Changes in payments per case also are affected by the complexity and costliness of Medicare cases (as measured by the Medicare case-mix index, or CMI). Fluctuations in the CMI directly affect PPS payments to hospitals.

Policy Changes in Recent Years—Policy changes made in fiscal years 1990 and 1991 had a greater effect on per-case payments than changes implemented earlier (see Table 2-12).[14] Whereas policy changes raised payment rates about 10 percent over the entire five-year period from 1985 through 1989, the increase was almost 9 percent over the two-year period, 1990 and 1991. This effect stemmed primarily from provisions in the Omnibus Budget Reconciliation Acts (OBRA) of 1989 and 1990. Among the most important of these was the phased-in elimination of the difference in the standardized amounts for rural and other urban hospitals, achieved by increasing the annual payment update for rural hospitals. In addition, the number of rural hospitals receiving the DSH adjustment was expanded and the size of the adjustment was increased for many urban hospitals. Another major change involved the basis of payment for sole community hospitals (geographically isolated facilities that are considered the only available source of inpatient care for the community). These hospitals now receive payments based on their 1982 or 1987 base-year costs or the PPS rate, whichever is greatest.

Major changes in OBRA 1993 are affecting fiscal year 1994 payments. Chief among them was the update to the urban standardized amount. It was set at the market basket minus 2.5 percentage points for urban hospitals, which resulted in an update of 1.8 percent. The rural standardized amount was updated by a higher amount (3.3 percent) to continue to phase out the differential in the rural and other urban standardized amounts. These two amounts will be equal beginning in fiscal year 1995.

Several factors explain the small increase in payments to rural hospitals in fiscal year 1994, despite the higher update of the standardized amount. Under OBRA 1989, hospitals may request, for payment purposes, reclassification from a lower to a higher paid geographic area. Just over 1,200 hospitals were reclassified in fiscal year 1993. The reclassification rules were tightened in fiscal year 1994 so that only about 670 hospitals were reclassified. Although the effect of reclassification has been reduced, new MSAs based on the 1990 census were implemented. As a result, many hospitals that previously had been in rural areas are now in newly defined urban areas. Finally, the special payment provisions for small rural Medicare-dependent hospitals are being phased out during fiscal year 1994.

Case-Mix Index Change—The CMI is the average DRG weight for all cases paid under PPS. It is a measure of the relative costliness of the patients treated in each hospital or group of hospitals. The CMI may increase because of changes in the types of patients treated or refinements of medical record documentation and coding practices. Real changes in costliness may be caused by treating patients who are more severely ill or who use more complex services. Refinements of medical record documentation and coding practices, on the other hand, may result in higher payments but do not reflect changes in treatment costs.

The CMI has grown steadily since the implementation of PPS. From fiscal year 1984 to fiscal

Table 2-12. Effects of PPS Update Factors and Other Payment Policy Changes on Per-Case PPS Payments, by Hospital Group, 1985-1994 (In Percent)

Hospital Group	Fiscal Year					Fiscal Years 1985-1994		
	1985-1989	1990-1991	1992	1993	1994	Total PPS Policy Effect	Cumulative Increase in Case-Mix Index*	Total Case Mix and Policy Effect
All hospitals	10.3%	8.6%	3.0%	2.6%	2.4%	29.4%	27.5%	64.9%
Urban	8.0	7.5	2.1	2.5	2.7	24.7	29.3	61.3
Rural	16.4	13.5	7.5	3.3	0.4	47.3	17.3	72.8
Large urban	7.8	7.7	1.9	2.2	3.3	24.8	28.5	60.5
Other urban	8.6	7.3	2.5	2.9	1.8	25.1	30.3	62.9
Rural referral	7.4	9.0	8.7	3.1	-0.3	30.9	23.7	61.9
Sole community	18.5	22.9	5.2	3.5	2.9	63.1	13.3	84.8
Other rural	20.2	13.2	7.4	3.4	0.0	51.1	12.7	70.2
Major teaching	-0.8	10.3	1.8	1.7	3.4	17.1	34.8	57.8
Other teaching	7.5	7.1	1.9	2.4	2.2	22.8	31.1	61.0
Non-teaching	13.4	8.7	3.7	2.9	2.2	34.4	23.5	66.0
Disproportionate share:								
Large urban	7.9	9.7	2.4	1.9	3.9	28.2	29.7	66.3
Other urban	9.0	8.3	3.4	2.7	2.0	27.9	30.4	66.8
Rural	13.2	15.7	9.7	2.8	1.6	50.0	18.8	78.3
Non-disproportionate share	11.4	7.7	2.6	2.9	1.7	28.8	26.2	62.5
Urban <100 beds	9.4	5.6	5.6	1.8	2.8	27.7	17.2	49.7
Urban 100-199 beds	10.6	7.3	2.3	3.0	2.9	28.6	22.5	57.5
Urban 200-299 beds	9.1	7.0	1.5	2.7	2.5	24.8	27.4	59.0
Urban 300-399 beds	7.9	7.9	1.8	2.6	2.5	24.5	30.2	62.1
Urban 400-499 beds	6.2	7.5	1.6	2.2	2.7	21.7	33.9	62.9
Urban 500+ beds	3.0	7.8	1.8	1.9	3.0	18.6	35.3	60.4
Rural <50 beds	20.9	17.3	5.4	3.7	0.2	55.3	7.6	67.2
Rural 50-99 beds	18.8	15.2	6.8	3.4	0.6	52.2	14.3	73.9
Rural 100-149 beds	15.6	13.2	8.7	3.5	0.9	48.5	18.9	76.5
Rural 150-199 beds	11.7	9.9	9.1	2.9	-0.4	37.3	20.0	64.8
Rural 200+ beds	7.1	10.1	8.6	2.8	0.4	32.1	24.6	64.7
New England	13.0	11.4	1.4	2.6	2.8	34.7	21.5	63.6
Middle Atlantic	3.2	8.3	1.7	0.8	4.1	19.3	25.6	49.8
South Atlantic	8.9	11.4	3.3	2.8	2.4	31.9	30.1	71.6
East North Central	8.1	6.0	3.1	3.2	1.0	23.2	26.8	56.3
East South Central	8.9	10.1	4.2	3.0	1.8	31.1	27.9	67.6
West North Central	16.2	6.8	3.2	3.2	1.4	34.1	27.6	71.1
West South Central	10.6	9.2	3.8	3.6	1.6	31.9	30.2	71.8
Mountain	8.8	9.1	2.9	3.3	1.7	28.2	27.6	63.6
Pacific	14.6	7.4	3.7	2.8	2.7	34.6	26.3	70.1
Voluntary	9.5	8.0	2.8	2.4	2.3	27.3	27.3	62.1
Proprietary	9.0	8.9	2.7	3.4	2.9	29.8	33.1	72.8
Urban government	8.8	9.7	2.2	2.4	3.5	29.1	28.1	65.4
Rural government	17.6	14.8	6.9	3.9	0.1	50.2	13.3	70.1

Note: Figures are not estimates of actual changes in fiscal year PPS hospital payments. They are meant to isolate the effects of changes in PPS rules on PPS payment rates, holding all other factors constant. Payments for each year are estimated based on the PPS rules in effect on the last day of the fiscal year. The effect of change in case mix is reflected only in the last two columns. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with fiscal year 1987 and New Jersey beginning with fiscal year 1989.

* The increases for fiscal years 1993 and 1994 were estimated based on historical trends.

SOURCE: ProPAC estimates based on ProPAC PPS payment model and fiscal year 1992 MedPAR file data from the Health Care Financing Administration.

year 1994, the increase is estimated to be 27.5 percent for all hospitals. Compared with rural facilities, urban hospitals have had CMIs that were higher and increased more rapidly. In fiscal year 1992, the CMI for urban hospitals was 22 percent higher than that for rural hospitals; in fiscal year 1984, it was about 13 percent higher. Within the urban and rural groups, both the CMI and the rate of CMI change are higher for larger facilities. Teaching hospitals as a group have higher and faster-growing CMIs than their non-teaching counterparts.

These differences in the rate of CMI change raise an important issue related to PPS payment policy. The distribution of payments is substantially affected by the pattern of CMI change. However, a significant portion of CMI change may be a result of refinements in coding practices instead of real increases in patient costliness. To the extent that different hospitals engage in different coding practices, the distribution of PPS payments thus may be significantly affected by factors unrelated to patient resource requirements.

Cumulative Effects of Payment Policy Changes—Payment policy decisions since the first year of PPS have increased per-case payments by 29.4 percent. Rural hospitals in particular have benefited from these decisions. Since the first year of PPS, these increases have been about twice as high for rural hospitals as for urban ones (47.3 percent compared with 24.7 percent).

Small rural facilities—most notably sole community hospitals—have been helped by PPS policy changes. The cumulative effect of these changes on per-case payments for rural hospitals with fewer than 100 beds exceeded 50 percent. The cumulative effect for sole community hospitals alone is 63.1 percent—the highest of any of the hospital groups.

The IME adjustment was reduced in fiscal year 1986, largely in reaction to the extremely high payments teaching hospitals received in the first year of PPS. This led to a policy-related decrease in per-case payments for major teaching hospitals in that year. The cumulative policy-related increase since the first year of PPS for these hospitals has been less than half that for non-teaching facilities. This occurred even though teaching hospitals receive the vast majority of DSH payments, which have increased considerably in recent years.

Historically, much of the policy debate each year focuses on the size of the PPS update factor, although other payment policy decisions also attract attention. However, CMI change has been almost as important as payment policy in determining the overall increase in per-case PPS payments. As discussed above, CMI change has led to an overall increase of 27.5 percent in per-case PPS payments, only slightly less than the growth resulting from PPS policy changes. Moreover, the distribution of CMI change across hospitals is often quite different from the effect of payment policy. For example, policy changes increased per-case payments for rural hospitals substantially, but the change in their CMI was well below average. Consequently, payments to rural hospitals have been lower than for urban hospitals.

Medicare Payments for Hospital Outpatient Services

Payments for outpatient services constitute a growing share of hospital revenues and an increasing percentage of dollars hospitals receive from Medicare. Under Medicare's payment method, if costs or charges for these services rise, so will payments. Therefore, these facilities have limited incentives to control costs. The Congress has mandated that Medicare propose a prospective payment system for outpatient services. Ambulatory surgery and radiology are the first candidates for a new prospective payment method.

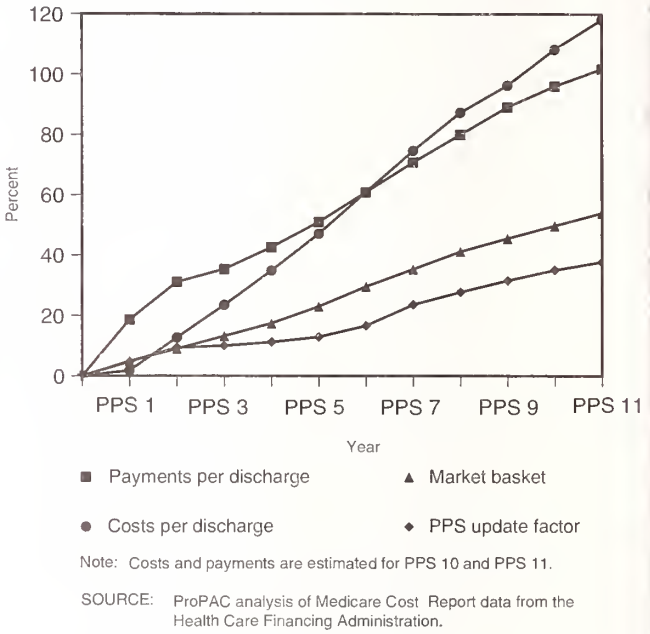
For the majority of hospital-provided ambulatory surgeries, Medicare pays the lower of costs, charges, or a blended amount. The blended amount combines a portion of the hospital's costs or charges (whichever is lower) with a portion of the prospective rate that would have been paid if the surgery had been provided in a free-standing ambulatory surgery center. Radiology services are paid under the same method. For these services, the prospective payment amount in the blended formula is that percentage of the physician fee schedule amount which represents the technical portion of the payment.

Laboratory services are already paid using a prospective fee schedule. Some nonsurgical procedures, such as ambulance services; emergency

room visits; and physical, speech, and occupational therapy services, are paid the lesser of reasonable costs or the provider's customary charge. Rural primary care hospitals can choose between two payment methods for outpatient services, one based on facility cost and professional charges and the other on an all-inclusive rate (including facility and professional medical services).

Overall, Medicare payment to cost ratios for hospital outpatient procedures were slightly lower than those for inpatient procedures in 1991. For surgical procedures, payments from Medicare and its beneficiaries covered 86.4 percent of costs. For radiology procedures, these payments covered 82.2 percent of costs. Major teaching hospitals received the lowest payments relative to costs for surgeries (77.8 percent). For radiology procedures, their payments relative to costs were among the lowest of any hospital group (77.7 percent). Rural hospitals with fewer than 50 beds received payments that covered an even lower proportion of costs for radiology (76.6 percent) although they did not perform as many procedures.[15]

Figure 2-7. Cumulative Increases in PPS Costs and Payments Per Discharge, First 11 Years of PPS (In Percent)



Note: Costs and payments are estimated for PPS 10 and PPS 11.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

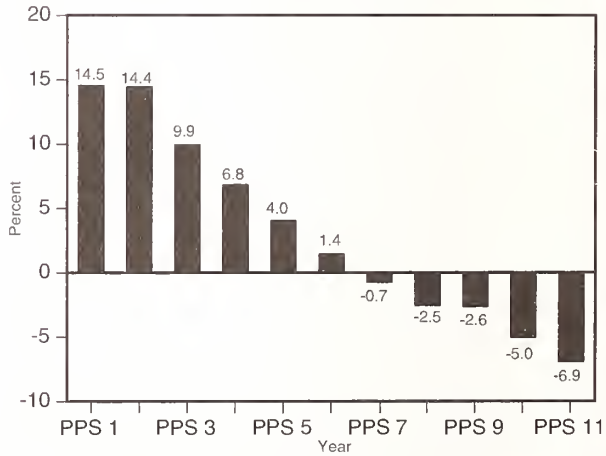
PPS Operating Margins

Medicare PPS operating payments are the single largest source of revenue for hospital services. The costs and payments attributable to inpatient care for Medicare beneficiaries have a major effect on hospitals' overall financial position. In the first year of PPS, payments per discharge increased more rapidly than costs (see Figure 2-7). Although these payments have grown more slowly than costs in each year since then, they cumulatively had increased more than costs until the sixth year of PPS.

The total growth in PPS operating costs per discharge is projected to reach 118.2 percent by the current (eleventh) year of PPS. This exceeds not only the 101.8 percent growth in payments per discharge but also the 54.0 percent rise in the costs of hospital inputs (measured by the hospital market basket).

The PPS operating margin is the difference between PPS payments and Medicare operating costs divided by PPS operating payments. Cost growth continued in the early years of PPS, depressing PPS operating margins, which have been negative since the seventh year of PPS (see Figure 2-8). For the eleventh PPS year, the aggregate PPS operating margin is estimated at –6.9 percent. This margin is higher than previously expected due to the recent slowdown in the growth of costs.

Figure 2-8. Aggregate PPS Operating Margin, First 11 Years of PPS (In Percent)



Note: PPS margin estimated for PPS 10 and PPS 11.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Trends in PPS Operating Margins—In the first year of PPS, cost-control measures taken by hospitals in anticipation of the new payment method, combined with high payment rates, led to elevated PPS margins (see Table 2-13). In the first two years virtually all hospital groups had strong PPS margins; those for urban and teaching hospitals were the highest. Urban-rural differences had moderated

Table 2-13. PPS Operating Margins, by Hospital Group, Selected PPS Years (In Percent)

Hospital Group	PPS 1	Subsequent PPS Years				
		PPS 5	PPS 6	PPS 7	PPS 8	PPS 9
All hospitals	14.5%	4.0%	1.4%	-0.7%	-2.5%	-2.6%
Urban	15.6	4.7	1.9	-0.4	-2.4	-2.6
Rural	8.4	-0.3	-2.0	-3.0	-3.7	-2.7
Large urban	16.1	4.3	1.7	0.3	-1.3	-1.7
Other urban	15.0	5.2	2.1	-1.3	-3.9	-3.9
Rural referral	9.9	3.3	0.1	-2.4	-3.8	-1.2
Sole community	8.5	-2.3	-3.8	-1.5	-0.2	-0.7
Other rural	7.5	-2.8	-3.2	-4.1	-5.0	-4.8
Major teaching	19.2	12.1	9.2	8.7	7.8	8.0
Other teaching	16.3	5.5	2.9	0.3	-1.7	-2.2
Non-teaching	12.4	0.5	-2.1	-4.4	-6.5	-6.4
Disproportionate share:						
Large urban	16.2	7.9	5.6	5.2	4.0	4.1
Other urban	14.7	6.8	4.3	1.6	-1.0	-1.4
Rural	8.9	1.1	-0.3	-1.3	-1.6	-0.5
Non-disproportionate share	14.0	0.9	-2.0	-4.9	-6.8	-7.1
Payment adjustments:						
IME and DSH	16.7	9.9	7.4	6.2	4.3	4.3
IME only	17.4	3.7	0.7	-2.5	-3.6	-4.7
DSH only	12.7	2.5	0.4	-1.3	-2.7	-2.9
No IME or DSH	12.1	-0.8	-3.7	-6.4	-8.9	-8.7
Urban <100 beds	12.9	0.3	-2.3	-4.8	-8.0	-7.4
Urban 100-199 beds	14.2	2.3	-0.3	-2.8	-4.6	-4.6
Urban 200-299 beds	14.7	2.4	-0.4	-3.1	-4.9	-4.8
Urban 300-399 beds	16.2	5.6	2.7	0.6	-2.1	-2.4
Urban 400-499 beds	15.5	6.8	4.3	2.2	0.2	-0.8
Urban 500+ beds	18.8	8.2	4.8	3.0	1.3	0.9
Rural <50 beds	6.6	-1.5	-1.8	-1.5	-3.9	-3.7
Rural 50-99 beds	9.1	-1.4	-1.6	-2.0	-1.9	-1.9
Rural 100-149 beds	8.6	-1.5	-4.4	-4.4	-4.1	-2.5
Rural 150-200 beds	7.8	2.5	0.2	-3.0	-3.3	-3.2
Rural 200+ beds	9.8	1.2	-2.1	-4.2	-5.7	-3.0
Voluntary	14.9	4.4	1.9	-0.4	-2.5	-2.9
Proprietary	14.8	1.6	-2.2	-4.3	-3.7	-2.3
Urban government	14.7	6.1	3.5	2.6	-0.3	0.3
Rural government	7.2	-2.3	-3.5	-3.9	-4.5	-5.2

Note: Data for each PPS year (PPS 1, PPS 2, etc.) correspond to each hospital's cost reporting period beginning in that year. For instance, the PPS 1 year includes data from each hospital's cost report beginning during the first year of PPS (Federal fiscal year 1984). Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with PPS 3 and New Jersey beginning with PPS 6. IME = indirect medical education. DSH = disproportionate share.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

by the fifth year of PPS and have continued to narrow, largely because of policy changes. By the eighth year, small- and medium-sized rural facilities had PPS margins that were higher than their urban counterparts.[16]

Major teaching hospitals have consistently had the highest PPS margins. The spread between these hospitals and other teaching and non-teaching hospitals increased in the ninth year. Major teaching hospitals had aggregate PPS margins that were well above zero, while other teaching and non-teaching hospitals' PPS margins were negative.

The overall results for disproportionate share hospitals, especially those in large urban areas, partly reflect the fact that about one-third are teaching facilities receiving IME payments. This group had a positive aggregate PPS margin in the ninth year. Facilities receiving the DSH payment adjustment alone, along with those that got only the IME or neither adjustment, had negative PPS margins.

Distribution of PPS Operating Margins— With the growth in hospitals' PPS operating costs outpacing that in PPS payments, the distribution of PPS margins across hospitals warrants attention. As these margins have declined, hospitals have begun to encounter financial difficulty under the system. By the sixth year of PPS, hospitals were more likely to have negative PPS operating margins than was the case earlier (see Table 2-14). Further, the difference between facilities with the highest and lowest PPS margins has grown every year. In the ninth year of PPS, the spread between facilities with the highest and lowest margins increased to more than 48 percentage points.

Within hospital groups, PPS operating margins varied greatly in the ninth year of PPS (see Table 2-15). Urban and rural hospitals had almost equal aggregate margins, although margins for urban facilities were more likely to be negative. Small urban and large rural hospitals were likelier to have negative margins than facilities of other sizes in the same geographic location.

Major teaching facilities and disproportionate share hospitals in large urban areas were less likely than other hospitals to have negative operating margins. As with aggregate margins, this partly reflects the interaction of the IME and DSH adjustments. This suggests that the IME and DSH payment adjustments may more than compensate for the added Medicare costs borne by teaching and disproportionate share hospitals. However, many of these hospitals have low total margins despite their relatively high PPS margins.

Among urban hospitals, PPS margins increase with size. Rural hospitals show a more mixed pattern, possibly reflecting special payment adjustments for sole community hospitals and for small rural Medicare-dependent hospitals.

CONCLUSIONS

While hospital costs have increased much faster than economywide inflation over the last two decades, cost growth appears to have slowed in

Table 2-14. Distribution of PPS Operating Margins and Percentage of Hospitals with Negative Margins, First Nine Years of PPS (In Percent)

Percentile	PPS 1	PPS 2	PPS 3	PPS 4	PPS 5	PPS 6	PPS 7	PPS 8	PPS 9
10th	-6.7%	-8.7%	-16.2%	-19.7%	-24.3%	-26.3%	-27.5%	-29.9%	-32.2%
25th	3.4	2.1	-3.8	-6.8	-9.7	-12.0	-13.7	-16.5	-16.9
Median	11.3	10.7	5.6	3.6	1.5	-0.8	-2.6	-4.5	-4.0
75th	17.7	18.0	13.4	11.8	10.9	9.3	7.9	6.6	6.9
90th	23.1	24.4	19.8	19.0	19.3	18.1	17.3	15.5	16.4
Percentage of hospitals with negative PPS operating margins	16.8	18.8	32.3	39.8	46.1	51.8	56.7	60.8	59.4

Note: Data for each PPS year (PPS 1, PPS 2, etc.) correspond to each hospital's cost reporting period beginning in that year. For instance, the PPS 1 year includes data from each hospital's cost reporting period beginning during the first year of PPS (Federal fiscal year 1984). Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with PPS 3 and New Jersey beginning with PPS 6.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Table 2-15. Distribution of PPS Operating Margins, by Hospital Group, Ninth Year of PPS (In Percent)

Hospital Group	Percentile			Percent with Negative PPS Margins
	25th	Median	75th	
All hospitals	-16.9%	-4.0%	6.9%	59.4%
Urban	-17.1	-4.9	5.7	62.0
Rural	-16.9	-2.9	8.2	56.3
Large urban	-17.1	-4.2	6.9	59.7
Other urban	-16.9	-5.3	3.8	64.7
Rural referral	-11.0	-1.6	7.0	53.1
Sole community	-14.9	0.1	10.5	50.0
Other rural	-18.7	-4.6	7.3	59.3
Major teaching	-2.3	8.1	18.4	29.1
Other teaching	-12.1	-2.4	6.6	57.5
Non-teaching	-18.3	-5.2	6.2	61.2
Disproportionate share:				
Large urban	-9.8	2.1	12.7	45.3
Other urban	-11.9	-2.3	7.5	57.3
Rural	-11.2	1.2	12.9	46.6
Non-disproportionate share	-19.4	-6.3	4.7	64.3
Payment adjustments:				
IME and DSH	-6.0	3.0	12.7	42.3
IME only	-16.6	-5.6	3.6	64.5
DSH only	-13.4	-1.6	9.8	53.6
No IME or DSH	-19.8	-6.4	4.8	64.2
Urban <100 beds	-21.5	-7.0	4.7	65.0
Urban 100-199 beds	-18.2	-5.4	5.9	63.0
Urban 200-299 beds	-17.1	-6.1	3.7	65.2
Urban 300-399 beds	-13.4	-3.2	7.4	57.7
Urban 400-499 beds	-10.9	-1.8	8.0	55.2
Urban 500+ beds	-7.8	0.1	8.8	49.3
Rural <50 beds	-20.0	-4.0	8.3	57.8
Rural 50-99 beds	-15.1	-1.8	9.1	53.9
Rural 100-149 beds	-11.4	-3.3	7.9	54.0
Rural 150-199 beds	-13.3	-2.8	6.5	54.6
Rural 200+ beds	-13.7	-3.9	5.6	61.3
Voluntary	-16.5	-4.4	5.8	61.1
Proprietary	-15.5	-1.5	11.4	53.3
Urban government	-17.7	-3.0	8.1	59.7
Rural government	-19.3	-4.3	7.7	58.0

Note: Excludes hospitals in Maryland. IME = indirect medical education. DSH = disproportionate share.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

1993. Whether this indicates a long-term change in the cost trend is difficult to determine. There have been slowdowns in the past that corresponded to actual or impending policy changes, followed by acceleration in cost growth when the pressure was removed or failed to materialize.

Hospitals do, in fact, appear to be changing or preparing to change the way they operate. Although hospital staffing increased in 1993, it did not match the growth in hospital output. Hospital staff wages and benefits, for the first time, grew more slowly than wages and benefits in all

industries. Again, whether these changes continue and apply to other inputs remains to be seen.

Despite stepped-up pressure from public and private payers, hospitals have been able to generate enough revenue to cover their costs. The aggregate total margin increased from 3.3 percent in 1988 to 4.6 percent in 1992, and preliminary data indicate a higher margin in 1993. Some of this increase reflects the fact that hospitals face a riskier financial environment than they did a decade ago—despite the fact that one-quarter of all hospitals had total margins of at least 7.3 percent, more than one-quarter had negative margins.

Hospitals have relied on cost shifting—payments from private payers in excess of the costs of their patients—to offset losses from public payers and uncompensated care. There are substantial differences across types of hospitals, however, in their need and ability to cost shift, depending on their mix of patients and the extent to which they can generate excess payments from private payers. Hospitals are also increasing non-patient revenues to maintain or improve their financial status.

These trends imply that, unless hospital cost growth can be controlled, hospital performance and survival will increasingly depend on the ability to cost shift or find other ways to produce additional revenue. But the willingness of private payers to continue to underwrite hospital cost increases may be limited. Furthermore, because the ability to cost shift varies across hospitals, it will result in a wider gap between those that are successful and those that have chronic financial problems. This, in turn, is likely to have dire consequences for the populations that tend to rely on the latter group of hospitals for access to medical care.

Notes to Chapter 2

1. As elsewhere in this chapter, general inflation is measured by the CPI-U-X1 index. See Council of Economic Advisers, *Economic Report of the President 1994* (Washington, DC: U.S. Government Printing Office, 1994)336.

   References to cost per adjusted admission correspond to expense per adjusted admission as defined by the American Hospital Association (AHA). Total expenses are all hospital outlays for labor, non-labor, and capital costs. They comprise costs incurred for all purposes—inpatient care, outpatient care, and non-patient activities. Adjusted admissions provide a measure of all patient care activity undertaken. They are equivalent to the sum of inpatient admissions and an estimate of the volume of outpatient services. This estimate is calculated by multiplying outpatient visits by the ratio of outpatient charges per visit to inpatient charges per admission. See American Hospital Association, *Hospital Statistics: 1992-1993 Edition* (Chicago, IL: AHA, 1993)xxiv.

2. American Hospital Association National Hospital Panel Survey data indicate growth of real expense per adjusted admission of 5.0 percent in 1992 and 1.8 percent in 1993.

3. In this and all other tables in this chapter, hospitals are considered urban or rural on the basis of their geographic location, rather than their payment status. Hospitals that have been reclassified for Medicare payment purposes are still counted as rural hospitals, and any increase in payments resulting from such reclassification is considered an increase in payments to rural hospitals.

4. Information on total margins is available from the AHA and HCFA. The AHA data are collected in the AHA Annual Survey of Hospitals, complemented by sample data for recent months collected in the AHA National Hospital Panel Survey. The HCFA data are based on information in Medicare Cost Reports, which all hospitals submit to the Federal government. The AHA data provide information on long-term trends, while the HCFA data allow analysis of the distribution of total margins across and within hospital groups. ProPAC's research indicates that total margins calculated from the two sources are comparable.

5. The 1993 conclusion is based on information from the AHA National Hospital Panel Survey sample of community hospitals. This survey reports total margins of 5.2 percent in 1991, 5.2 percent in 1992, and 5.5 percent in 1993. The AHA Annual Survey of Hospitals, a more complete data source, reports total margins of 4.3 percent in 1991 and 4.6 percent in 1992. It was not available for 1993 by press time.

6. States make extra Medicaid payments to hospitals that they designate as disproportionate share hospitals; these hospitals are not necessarily the same as those that receive Medicare DSH payments. See Prospective Payment Assessment Commission, *Analysis of Medicaid Disproportionate Share Payment Adjustments*, Congressional Report C-94-01, January 1994, 2.

7. These data are from the AHA's National Hospital Panel Survey while the data in Table 2-7 are from the AHA's Annual Survey of Hospitals.

8. In ProPAC's 1993 report, *Medicare and the American Health Care System*, Table 2-17, Change in Labor Expenses Per FTE Employee, 1981-1991, is adjusted for skill mix. Table 2-8 in this year's report does not adjust for skill mix. An adjustment factor was not available for 1992, and examination of the skill mix adjustment series since the late 1980s suggests that the adjustment currently has minimal impact. This may be because a large part of the change in skill mix in the late 1980s consisted of the increased use of registered nurses and their substitution for licensed practical nurses. See Prospective Payment Assessment Commission, *Medicare*

and the American Health Care System: Report to the Congress, June 1993, 64.

9. The wage index is applied to the labor-related portion (about 70 percent) of the standardized amount. For hospitals in Alaska and Hawaii, a cost-of-living adjustment is applied to the non-labor-related portion (about 30 percent) of the standardized amount.

10. The Omnibus Budget Reconciliation Act of 1990 mandated that the difference between the other urban and the rural standardized amounts be eliminated by fiscal year 1995.

11. Congressional Budget Office, unpublished estimate, December 1993.

12. Payments for day outliers (cases with exceptionally long stays) will be phased out beginning in fiscal year 1995 and ending in fiscal year 1998.

13. In fiscal year 1995, with the elimination of the differential between the standardized payment amounts for rural and other urban areas, these reductions will be equal for all hospitals.

14. This effect is measured relative to the policy in place during the first PPS year. In implementing PPS, a four-year transition period was used to move gradually from payment rates based on hospital-specific costs to rates based on national average costs. To isolate the effects of policy changes from those related to the transition, the estimates presented here reflect only the impact on the national payment rates. Moreover, the policies in effect at the end of each fiscal year (including any adopted during the year) are treated as if they applied for the entire year. Although this approach does not measure differences in actual payments from year to year, it more accurately indicates the ultimate impact of PPS policy changes.

15. ProPAC analysis of HCFA outpatient bills and Medicare Cost Report data. Analysis is based on 1991 data using 1992 rules. Data are from 4,494 facilities (197,859 cases) for surgery and 5,277 facilities (1,196,180 cases) for radiology.

16. This does not mean that rural hospitals had higher PPS margins than urban hospitals of equal bed size. Since the size distributions of urban and rural facilities differ greatly, it is more informative to compare hospitals based on their size relative to other, similarly located facilities. The text statement compares PPS 9 aggregate PPS margins for rural hospitals having fewer than 150 beds (91 percent of rural facilities) with urban hospitals having fewer than 300 beds (76 percent of urban hospitals).

Chapter 3

The Changing Health Care Delivery Environment

Chapter 3

The Changing Health Care Delivery Environment

Today's health care delivery system differs dramatically from that of only 10 years ago. People now have access to a broader array of services, providers, and sites of care than ever before. Treatment protocols have improved significantly, becoming more effective, less invasive, or more acceptable to patients. Advances in medical technology have allowed previously untreatable conditions to be cared for and more procedures to be performed out of the hospital setting. This has spurred the proliferation of new types of non-hospital providers and new medical specialties, further broadening the choices available to patients.

As the health care delivery system has diversified, so too has the payment environment. In response to rising health care spending, many payers have designed and implemented payment systems that control growth and added new managed care systems.

This evolving payment environment has, in turn, affected the structure of the delivery system. New types of providers are emerging to meet the changing demand. Financing and delivery systems are combining into provider networks and managed care entities. These transformations are strongly influencing what services are offered, where they are provided, and who can obtain them.

This chapter describes the complex interactions between the health care delivery and payment systems and how they affect the individual. The first section describes changes in the U.S. population, supply of services, and utilization over the past decade. The needs of the elderly and the availability of health care providers, including the growth of new types, are discussed. The resulting increase in utilization and changes in the patterns of care are then presented.

The next section highlights the payment environment consumers face in view of increasing use and rising health care spending. Payers have tried to control costs by limiting service use and directing where patients receive their care. Each of the major payers is described, along with how their expenditures have grown and how they have attempted to restrain spending.

The final section deals with how changing delivery and financing systems are affecting access to medical care in general and, in particular, access to quality medical care. The implications of being uninsured and the disparity between rural and urban areas are also discussed.

The extent to which quality of care is monitored also differs tremendously. Quality is not managed uniformly across sites, providers, or payers. New sites of care are less likely than established facility types to have quality assurance programs. These issues are increasingly important as payers attempt to control expenditures, possibly encouraging providers to eliminate or reduce their services. The chapter concludes by summarizing mechanisms for monitoring quality in alternative settings, and discussing the implications for organizing and monitoring the health delivery system in the future.

THE AGING U.S. POPULATION

Life expectancy in the United States has increased markedly over the past century, a trend that is expected to continue into the 21st century. The average lifespan for males born in 1940, for example, was 61.4 years; for those born in 1991, it is 71.8 years. The percentage of the population 65 years or older is also projected to grow from 12.3 percent in 1990 to between 18 and 20 percent by the year 2030.[1]

The aging of the population is particularly important because growing old is associated with higher health care expenditures. In 1987 (the most

recent year for which data are available) people 65 and older with any health care expenditures spent an average of $4,564, compared with $2,375 for those 45 to 64 and $1,250 for those 18 to 44. Similarly, hospitalizations for the elderly were more expensive, averaging $10,952, compared with $8,852 for people 45 to 64 years old and $4,220 for those 18 to 44. In addition, elderly persons who used prescription medicines spent more than $330 a piece during that year, compared with only $97 per person for the population 18 to 44.[2]

Clearly, age is correlated with higher health spending. Older populations use more services and spend more per person than younger people. The increasing percentage of Americans over 65, therefore, is almost certain to be correlated with rising total health spending, absent changes in the health care delivery or financing systems. However, these effects may be small relative to the increases associated with advances in medical practice.

THE HEALTH CARE DELIVERY SYSTEM

Today's health care system has expanded; the array of providers and services is more complex than in the past. Hospitals are diversifying and specializing to offer a wider choice of services. Many new types of providers and treatment settings have proliferated as technological advances have allowed treatments to be performed in less intensive settings. As services and settings have increased, so has utilization.

Supply of Medical Services

The total number of hospitals declined by about 6 percent between 1980 and 1992 (see Table 3-1). There were about 40 percent more psychiatric hospitals, but many community, long-term, and government hospitals have closed. More than 20 percent of rural hospitals have closed, while there has been a 6.3 percent rise in urban facilities. Hospital beds per capita fell from 4.5 per 1,000 people to 3.8 per 1,000 during the period.[3] This decline was due to closures and hospital downsizing, particularly for facilities with more than 399 beds.

The change in hospital functions has been more dramatic than the change in capacity. Technological capabilities have expanded. Although larger hospitals acquire technologies soon after they emerge, smaller facilities are slower to adopt them (see Table 3-2). In 1982, for example, 96 percent of hospitals with 500 beds or more had a computerized tomography (CT) scanner, compared with less than 2 percent of those with fewer than 50 beds. By 1991, 37 percent of smaller (25 to 49 beds) hospitals had a CT scanner. Similarly, the proportion of the smallest hospitals having an ultrasound machine more than doubled between 1982 and 1991, from 20 percent to 46 percent. Although these hospitals did not set up open-heart surgery facilities or cardiac catheterization laboratories, their larger counterparts expanded their cardiac treatment capabilities substantially between 1982 and 1991.

Hospitals have also stepped up their non-inpatient capacity (see Table 3-3). In 1985, only 54.1 percent had any type of organized outpatient services; by 1992, this had risen to 88.9 percent. Rural hospitals showed the greatest increase; those offering outpatient services more than doubled—from 39.3 percent in 1985 to 84.1 percent in 1992. Hospitals also added rehabilitation, skilled nursing, and home health programs as well as psychiatric and drug dependency units.

Physician supply and the types of office-based primary care physicians have changed as well. The number of physicians providing patient care rose from 13.5 to 19.5 per 10,000 people between 1975 and 1990.[4] The percentage who regard themselves as general practitioners or family physicians declined from 13 percent in 1975 to 10 percent in 1990. By contrast, those in internal medicine increased from 8 percent to 10 percent. The percentage of physicians specializing in other fields remained about the same.

These changes have been accompanied by the emergence of new and specialized settings in which care is provided. In 1994, 1,739 ambulatory surgery centers (ASCs) were certified by Medicare, an increase from only 485 in 1986 (see Table 3-4).[5] Similarly, the growth in the number of comprehensive outpatient rehabilitation facilities (CORFs), hospice programs, and renal dialysis facilities has skyrocketed. Entirely new types of ambulatory providers, such as diagnostic imaging centers and cancer centers, have also developed over the past decade (see Table 3-5). These facilities may compete with hospitals for patients.

Table 3-1. U.S. Hospitals, by Category, Selected Years

Hospital Category	1980	1985	1990	1992	Percent Change 1980-1992
All hospitals	6,965	6,872	6,649	6,539	-6.1%
Short-term	6,407	6,339	6,141	6,092	-4.9
Long-term	558	533	508	447	-19.9
General medical and surgical	6,105	5,961	5,566	5,424	-11.2
Psychiatric	558	629	774	791	41.8
Tuberculosis and other specialty	302	282	309	324	7.3
Community*	5,830	5,732	5,384	5,292	-9.2
Noncommunity	1,135	1,140	1,265	1,247	9.9
6-24 beds	327	267	301	294	-10.1
25-49 beds	1,209	1,134	1,095	1,078	-10.8
50-99 beds	1,674	1,666	1,633	1,595	-4.7
100-199 beds	1,567	1,618	1,562	1,572	0.3
200-299 beds	802	848	830	823	2.6
300-399 beds	484	507	503	489	1.0
400-499 beds	334	301	276	256	-23.4
500+ beds	568	531	449	432	-23.9
Voluntary	3,505	3,544	3,388	3,363	-4.1
Proprietary	891	1,052	1,139	1,134	27.3
Federal government	359	343	337	325	-9.5
Nonfederal government	2,210	1,933	1,785	1,717	-22.3
Residency training	1,257	1,232	1,249	1,223	-2.7
Medical school affiliation	997	1,120	1,238	1,154	15.7
Council of Teaching Hospitals member	406	454	387	381	-6.2
Urban	3,791	3,959	3,937	4,030	6.3
Rural	3,174	2,913	2,712	2,509	-21.0
New England	373	361	341	331	-11.3
Middle Atlantic	800	761	726	710	-11.3
South Atlantic	1,026	1,037	1,050	1,043	1.7
East North Central	1,060	1,022	959	957	-9.7
East South Central	548	547	532	523	-4.6
West North Central	896	883	846	820	-8.5
West South Central	955	972	943	919	-3.8
Mountain	448	462	464	464	3.6
Pacific	859	827	788	772	-10.1

* Community hospitals include nonfederal short-term general and some specialty hospitals.

SOURCE: American Hospital Association Annual Survey of Hospitals.

Hospice programs, which administer palliative care to the dying, have also multiplied. Recent data indicate there were 1,935 operational hospice programs in 1992, up from 1,529 in 1989. About 40 percent are independent hospice corporations, 37 percent are a division of a hospital, 21 percent are a division of a home health agency (HHA), and 2 percent are owned or operated by other facilities or entities. About 72 percent are certified by Medicare or are awaiting certification.[6]

The number of post-acute care facilities has also increased substantially. Nursing facility beds certified either by Medicare or by Medicaid went from almost half a million in 1989 to over 615,000 in 1993, an increase of 24.3 percent (see Table 3-6).

Table 3-2. Hospitals Providing Selected Services, 1982 and 1991 (In Percent)

Bed Size	Cardiac Catheterization			Open-Heart Surgery			Computerized Tomography Scan			Ultrasound		
	1982	1991	Percent Change	1982	1991	Percent Change	1982	1991	Percent Change	1982	1991	Percent Change
All hospitals	16.6%	29.2%	75.9%	11.1%	17.4%	56.8%	31.1%	72.9%	134.4%	73.0%	84.2%	15.3%
6-24	0.5	0.0	-100.0	0.0	0.0	0.0	0.5	10.1	1,920.0	19.5	46.2	136.9
25-49	0.5	0.4	-20.0	0.0	0.0	0.0	1.2	36.5	2,941.7	34.3	64.4	87.8
50-99	1.1	3.7	236.4	0.4	0.5	25.0	4.5	65.5	1,355.6	60.6	80.9	33.5
100-199	5.9	21.7	267.8	2.9	6.7	131.0	23.0	84.9	269.1	86.1	90.3	4.9
200-299	24.4	56.9	133.2	12.4	28.5	129.8	57.2	94.4	65.0	96.8	96.6	-0.2
300-399	40.1	77.8	94.0	24.6	53.0	115.4	80.9	98.4	21.6	97.1	97.4	0.3
400-499	62.1	89.2	43.6	44.6	68.1	52.7	90.3	97.7	8.2	98.5	98.1	-0.4
500+	88.6	92.3	4.2	73.8	83.5	13.1	96.0	97.1	1.1	99.1	97.4	-1.7

Note: Includes short-term general and other specialty hospitals.

SOURCE: American Hospital Association, *Hospital Statistics*, 1983 and 1992-93.

Home health agencies grew by 25.7 percent—from over 11,000 in 1989 to almost 14,000 in 1993.

Use of Medical Services

Improvements in treatment protocols and changes in service availability affect utilization, which in turn influences health care spending. To create a more complete picture of how the medical delivery system is changing and why expenditures are rising, it is necessary to examine the types of services people are using and where they are receiving them.

Inpatient hospital use has been steadily declining. Between 1979 and 1991, hospitalizations per 1,000 people dropped to 124.1 from 156.9 (see Table 3-7). Average length of stay also fell, from

Table 3-3. Community Hospitals Providing Non-Inpatient and Skilled Nursing Services, by Location, Selected Years (In Percent)

Location/Year	Any Organized Outpatient Services[a]	Surgery[b]	Psychiatric	Alcohol/Drug Dependency	Rehabilitation	Home Health	Skilled Nursing[c]
All hospitals							
1985	54.1%	93.4%	15.3%	16.1%	39.3%	29.7%	18.8%
1990	85.2	94.7	19.6	20.5	51.5	35.6	22.3
1992	88.9	94.4	21.9	21.0	55.0	38.0	34.0
Urban							
1985	66.9	95.7	23.6	22.9	54.9	31.8	11.1
1990	90.0	95.0	29.0	28.6	66.2	34.4	18.7
1992	92.6	94.7	31.2	28.8	67.3	35.8	26.0
Rural							
1985	39.3	90.7	5.8	8.2	21.3	27.4	27.6
1990	79.6	94.4	8.4	10.8	34.2	37.1	26.4
1992	84.1	94.1	9.9	10.9	39.0	40.9	44.4

[a] Trends in responses may reflect, in part, a change in the survey question between 1985 and 1990.

[b] Hospitals may provide outpatient surgery without having an organized outpatient department.

[c] Data for 1985 reflect the presence of skilled nursing services anywhere in the hospital. Data for 1990 and 1992 reflect the presence of a separate skilled nursing unit.

SOURCE: American Hospital Association Annual Survey of Hospitals.

Table 3-4. Medicare-Certified Facilities, Selected Years

Facility Type	Number of Medicare-Certified Facilities		
	1986	1990	1994
Psychiatric			
Hospitals	516	687	720
Distinct-part units	913	1,130	1,329
Rehabilitation			
Hospitals	75	135	187
Distinct-part units	470	687	804
Comprehensive outpatient rehabilitation	82	199*	237
Hospice	108	1,037*	1,478
Ambulatory surgery center	485	1,382*	1,739
Dialysis	1,435	2,183*	2,517

* Indicates number certified in 1991.

SOURCE: Health Care Financing Administration, Office of Survey and Certification.

Table 3-5. Supply of Selected Ambulatory Providers

Provider Type	Number of Facilities
Free-standing ambulatory surgery centers	1,160[a]
Ambulatory care centers	5,500[a]
Cancer centers	
Comprehensive cancer centers	1,700[a]
Radiation oncology centers	1,321[b]
Cardiac catheterization centers	2,000[b]
Diagnostic imaging centers	
Imaging centers	935-1,200[a]
Mammography centers	11,500[b]
Dialysis centers	1,376[c,d]
Lithotripsy centers	300-350[b]
Physician offices	50,000[a]

[a] 1992.

[b] 1993.

[c] 1991.

[d] Medicare-approved facilities only.

SOURCE: Adapted from Abt Associates, Inc., *Quality-Oriented Regulatory Requirements: Final Report*, ProPAC Extramural Report, forthcoming; SMG Marketing Group, *Report and Directory: Industry Characteristics, Trends and Market Projections Comparative Analysis*, April 1993; and Health Care Financing Administration, *Health Care Financing Research Report: End Stage Renal Disease, 1991*, HCFA Pub. No. 03338, May 1993.

7.1 days to 6.4 days. Inpatient use has diminished for many reasons, among them a shift of inpatient care to ambulatory settings, advances in technology that permit shorter recovery times, and changes in practice patterns.

The proportion of complex surgeries in the inpatient setting has increased as less complex ones have shifted to ambulatory sites (see Table 3-8). The rates of inpatient hernia repair and lens extractions, for instance, have decreased since 1980 because these procedures are now done most often on an ambulatory basis. Tonsillectomies are rarely performed in any setting. Inpatient cardiac catheterizations and coronary bypass surgeries, however, have grown substantially. The increase in cardiac catheterizations for the elderly population is especially dramatic, rising from 5.0 per 1,000 in 1980 to 18.4 per 1,000 in 1991 for elderly males, and from 2.1 per 1,000 to 11.1 per 1,000 for elderly females.

The number and type of physician visits have changed as well. Visits to physicians in all settings (including hospital outpatient departments and emergency rooms) per person have increased.[7] However, a smaller percentage of visits are to generalists and family practitioners. In 1985, for example, almost 73 percent of all office visits were made to general or family practice physicians; by 1990, this figure had dropped to 69 percent.

The number of people using Medicare-covered home health agency services has grown since the inception of the program (see Table 3-9). In 1974, only 16 Medicare enrollees per 1,000 had any HHA visit, compared with 80 per 1,000 enrollees in 1992. The number of visits per user also jumped, from 21 in 1974 to 53 in 1992. These higher use rates can be attributed to clarifications and revisions of the Medicare benefit in the late 1980s, technological advances that permit delivering new types of care in the patient's home, and earlier hospital discharges.

Medicare's end-stage renal disease (ESRD) benefit also illustrates the intense growth in the

Table 3-6. Medicare-Certified Nursing Facilities and Home Health Agencies, Selected Years

Year	Medicare-Certified Nursing Facilities	Total Beds Available for Medicare[a]	Medicare-Certified Home Health Agencies	All Home Health Agencies[b]
1989	8,285	495,237	5,676	11,097
1991	9,711	570,222	5,780	12,433
1993	10,370	615,725	6,497	13,951

[a] Total beds available for Medicare = beds certified by Medicare only plus those certified by both Medicare and Medicaid.

[b] Includes home care aide organizations and non-Medicare certified hospices.

SOURCE: ProPAC analysis of Provider Service File data from the Health Care Financing Administration; and National Association for Home Care, *Basic Statistics About Home Care 1993.*

use of a specific service. Because nearly everyone with ESRD is eventually enrolled in the Medicare program, Medicare statistics describe this population quite accurately. The ESRD population has changed over time, with more older and sicker patients receiving the benefit (see Table 3-10).[8] Between 1986 and 1991, ESRD patients 65 years or older and those having diabetes and hypertension experienced the largest increase in dialysis use. Between 1986 and 1991, for instance, the dialyzed population between 65 and 74 went up 62 percent, while the number of dialyzed people with diabetes rose 116 percent.

Patterns of Use

With the expansion of treatment options and the emergence of different sites of care and types of providers, beneficiaries are facing new choices in health care delivery. The factors affecting these decisions and the ways they interact are complex, reflecting medical opinion, beneficiary characteristics, and the availability of services. These choices may have different spending implications. Post-acute service use following a hip fracture is illustrative.

Of the 195,000 Medicare beneficiaries hospitalized for hip fracture in 1990, almost 70 percent received some type of post-acute care. Home health services were used by 40 percent within six months of hospitalization (see Table 3-11). Another 42 percent obtained skilled nursing facility care, and 5 percent received rehabilitation facility services. Many beneficiaries used more than one type of post-acute service. For example, 40 percent of those who received home health care also used skilled nursing or rehabilitation facility services, 30 percent of skilled nursing facility users also had home health care, and more than half who used rehabilitation facility services also obtained home health services.

Home Health Agency—Beneficiaries who used HHA services, when compared with those who did not, were likelier to be younger, poorer, and sicker, as measured by longer hospital stays (see Table 3-12). On the other hand, beneficiaries who were male, white, or rural residents were less likely to obtain home health care after fracturing their hip. Beneficiaries who were hospitalized in a county that had greater home health capacity or fewer nursing facility beds were more prone to use home health services.

Table 3-7. Short-Stay Hospital Discharges and Average Length of Stay, Selected Years

Age	Discharges Per 1,000 Population			Average Length of Stay (In Days)		
	1979	1984	1991	1979	1984	1991
Total	156.9	148.2	124.1	7.1	6.5	6.4
Under 15	70.8	62.0	45.3	4.3	4.5	4.8
15-44	151.8	132.2	99.3	5.2	4.9	4.6
45-64	192.4	183.3	132.2	8.2	7.2	6.5
65+	361.5	400.4	340.3	10.8	8.9	8.6

SOURCE: National Center for Health Statistics, *Health, United States 1986*; and Edmund Graves, "1991 Summary: National Hospital Discharge Survey," *Advance Data*, National Center for Health Statistics, No. 227, March 3, 1993.

Table 3-8. Inpatient Use of Selected Surgical and Diagnostic Procedures, Selected Years

Procedure	Age	Sex	Procedures Per 1,000 Population			Percent Change	
			1980	1985	1991	1980-1985	1985-1991
Arthroplasty and replacement of hip	65+	F	4.7	6.4	6.5	36.2%	1.6%
Cardiac catheterization	All	M	2.2	3.9	5.1	77.3	30.8
	65+	F	2.1	6.0	11.1	185.7	85.0
	65+	M	5.0	10.9	18.4	118.0	68.8
Cesarean section	All	F	4.8	6.3	6.5	31.3	3.2
Cholecystectomy	65+	F	5.4	5.2	6.1	-3.7	17.3
Coronary bypass	All	M	1.0	1.6	2.5	60.0	56.3
	65+	M	2.6	5.0	11.3	92.3	126.0
Extraction of lens	65+	M	12.0	4.6	1.6	-61.7	-65.2
	65+	F	13.8	6.1	2.5	-55.8	-59.0
Hysterectomy	All	F	5.2	5.0	3.9	-3.8	-22.0
Prostatectomy	All	M	3.1	3.2	2.8	3.2	-12.5
	65+	M	24.2	24.7	23.1	2.1	-6.5
Repair of inguinal hernia	All	M	4.6	3.3	1.3	-28.3	-60.6
	65+	M	11.4	10.1	4.5	-11.4	-55.4
Tonsillectomy, with or without adenoidectomy	<15	M	5.3	3.6	1.0	-32.1	-72.2
	<15	F	6.2	3.9	1.0	-37.1	-74.4

Note: Data do not reflect total procedure use because outpatient use is not captured in the National Hospital Discharge Survey. Comparisons of the 1991 data with data from earlier years should be made with caution as estimates of change may reflect improvements in the survey design, and revisions to the definitions of some procedures, rather than true changes in use.

SOURCE: National Center for Health Statistics, *Health, United States*, 1992, 129-30.

Skilled Nursing Facility—Skilled nursing facility services were more often used by older beneficiaries. Race also appeared to have an effect: White beneficiaries were likelier than nonwhites to have these services. How health status affected skilled nursing facility use was unclear. Beneficiaries hospitalized within 60 days prior to their hip fracture were more apt to obtain services than others, but the probability of use was not related to longer or more intensive care during their hospital stays. In addition, beneficiaries were more likely to use the skilled nursing facility if they were in a hospital with a distinct-part skilled nursing unit or a swing-bed program, but less likely if their hospital had a distinct-part rehabilitation unit. Having more skilled nursing facility services in the county of hospitalization increased the likelihood of obtaining the service, while having more hospital beds in the county decreased use.

Rehabilitation Facility—Older beneficiaries were less likely to receive rehabilitation facility services as were those who were sicker, as indicated by longer hospitalizations. Patients hospitalized in smaller or in rural hospitals or in hospitals with distinct-part rehabilitation units, skilled nursing facilities, or swing beds were less prone to use such services.

No Post-Acute Care—Beneficiaries who used none of these post-acute services were older than those who used home health and rehabilitation facility services, but younger than beneficiaries who received skilled nursing facility care. They were also likelier to be poor and male than those who used any of these services. Patients with longer lengths of stay for the fracture, as well as those hospitalized 60 days before the fracture occurred, were more likely to have had post-acute services.

Table 3-9. Medicare Home Health Care Utilization, Selected Years

Year of Service	People Served		Visits		
	Number (In Thousands)	Per 1,000 Enrollees	Number (In Thousands)	Per Person Served	Per 1,000 Enrollees
1974	393	16	8,070	21	340
1976	589	23	13,335	23	520
1978	770	28	17,345	23	639
1980	957	34	22,428	23	788
1982	1,172	40	30,787	26	1,044
1983	1,351	45	36,844	27	1,227
1984	1,516	50	40,337	27	1,324
1985	1,589	51	39,742	25	1,279
1986	1,600	50	38,359	24	1,208
1987	1,565	48	36,088	23	1,113
1988	1,602	49	37,713	24	1,144
1989	1,725	51	47,258	27	1,407
1990	1,967	57	70,268	36	2,054
1991	2,243	65	99,825	45	2,821
1992	2,506	80	132,220	53	3,725

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy.

The choices among types and patterns of service use have implications for Medicare expenditures and possibly for quality of care. Quality comparisons are difficult to make. However, payments for all Medicare-covered services in the six months after hospitalization for hip fracture were significantly greater for beneficiaries who received any of these post-acute services (see Table 3-13). Although it appears that the differences in Medicare payments for services in each of the three settings were not large, this is an artifact of the way service use was defined. Beneficiaries who used services in more than one setting were counted in the averages for each setting. In fact, combined Medicare payments for the hospitalization and the six months following discharge were 81 percent higher for

Table 3-10. Medicare Patients with End-Stage Renal Disease, by Age and Primary Diagnosis, Selected Years

Age/Primary Diagnosis	Number of Patients				Percent Distribution 1991	Percent Change 1986-1991
	1986	1989	1990	1991		
Total	93,197	118,797	129,991	142,510	100.0%	52.9%
Age						
Under 15	648	673	751	746	0.5	15.1
15-24	2,711	3,060	3,145	3,183	2.2	17.4
25-34	7,979	9,334	9,853	10,279	7.2	28.8
35-44	11,732	14,813	16,224	17,622	12.4	40.7
45-54	14,501	18,137	19,436	21,456	15.1	40.8
55-64	21,999	25,909	27,977	30,157	21.2	37.1
65-74	23,296	30,775	34,138	37,755	26.5	62.1
75+	10,331	16,096	18,467	21,312	15.0	106.3
Primary diagnosis						
Diabetes	18,179	28,690	33,491	39,269	27.6	116.0
Glomerulonephritis	15,948	19,032	20,138	21,133	14.8	32.5
Hypertension	22,133	31,036	34,662	38,850	27.3	75.5

Note: All calculations are based on unrounded numbers.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy.

Table 3-11. Characteristics of Medicare Beneficiaries Hospitalized with Hip Fracture, by Post-Acute Care Use, 1990 (In Percent)

Characteristic	Home Health Agency	Skilled Nursing Facility	Rehabilitation	No Use[a]
Total[b]	40.0%	41.7%	5.4%	29.5%
Proportion of users who are:				
Female	79.4	80.5	80.2	77.5
White	93.4	95.6	93.2	89.7
Age 85+	32.1	46.0	32.4	37.8
Poor[c]	10.3	15.5	9.2	18.5
Rural residents	23.2	27.2	15.1	31.8

[a] Beneficiaries in this group may have received post-acute services in the hospital outpatient department or from an independent physical therapist, but did not receive Medicare-covered services from a nursing facility, rehabilitation hospital, or home health agency.

[b] Since some beneficiaries used more than one type of post-acute service, the sum of this row exceeds 100.

[c] Includes dually eligible Medicare beneficiaries and Medicaid recipients.

SOURCE: ProPAC analysis of the MedPAR and National Claims History files from the Health Care Financing Administration.

beneficiaries who used a post-acute service than for those who did not. Furthermore, beneficiaries who obtained all three post-acute services (rehabilitation facility, skilled nursing facility, and home health) had payments that were, on average, 140 percent of those for beneficiaries who had only home health care.

THE PAYMENT ENVIRONMENT

Insurance coverage plays a significant role in shaping the health care delivery system and determining the supply and use of services. For certain services, liberalization of payment policies has facilitated growth in use, while in other situations private and public payers have instituted payment and coverage policies to restrain the growth. Both types of policy changes have influenced the delivery system. This section describes the various payers, their policies, and how these factors affect an individual's health care spending.

Approximately 85 percent of the U.S. population has health insurance coverage on any given day. (See Chapter 1.) About 65 percent of the population has private health insurance, primarily through employers. Another 13 percent are covered by Medicare and 8 percent are Medicaid recipients. Some people have multiple sources of coverage, although the exact numbers are unknown. Of the 15 percent without insurance, however, more than 60 percent are in families headed by workers with year-round, full-time, or part- time employment.[9]

Medicare

An estimated 36.8 million people are enrolled in Medicare in 1994 (see Table 3-14). Almost 90 percent are eligible because of age. These older enrollees represent about 96 percent of the total elderly U.S. population.

The Medicare program consists of two parts: Medicare Hospital Insurance (Part A) and Supplementary Medical Insurance (Part B). Medicare Part A coverage includes hospital inpatient, home health, skilled nursing, and hospice care. Medicare Part B coverage encompasses physician, hospital outpatient, home health, and outpatient dialysis services, as well as medical supplies and durable medical equipment.

Eligibility for Part A is based on age, disability status, or having irreversible kidney failure. People who are 65 and over and eligible for cash benefits under Social Security (including Railroad Retirement beneficiaries) are automatically eligible for Part A benefits. The small number of those 65 and over who are not eligible can purchase Part A coverage. People of any age with a permanent total disability who are eligible for monthly disability benefits and have received them for at least 24 months are also eligible for Part A coverage.[10]

Medicare Part B is open to everyone eligible for Part A. Enrollees pay a premium for coverage, which in 1994 is $41.10 per month. Although Part

Table 3-12. Characteristics Associated with a Beneficiary's Use of Post-Acute Services Following Hospitalization for Hip Fracture

Characteristic	No Post-Acute Use	Home Health Agency	Skilled Nursing Facility	Rehabilitation Hospital
Environmental				
Number of hospital beds in county per 1,000 persons 65 and over			–	+
Number of nursing facility beds in county per 1,000 persons 65 and over	+	–	+	–
Number of home health agencies in county per 1,000 persons 65 and over	–	+		+
Number of rehabilitation facility beds in county per 1,000 persons 65 and over				–
Hospital				
Location in rural area				–
Size				+
Has a rehabilitation unit	+	–	–	–
Has a skilled nursing facility unit	–		+	–
Has swing beds			+	–
Patient				
Age	–	–	+	–
Sex (male)	+	–		
Race (nonwhite)		+	–	
Resides in rural area		–		
Poor	+	–		
Length of hospitalization for hip fracture	–	+		–
Hospitalization included intensive care unit stay		+		
At least one hospitalization in prior 60 days	–	+	+	
At least one hospitalization in six months after hip fracture			–	+

Note: + means the characteristic is associated with a significantly higher likelihood of use of the service; – means the characteristic is associated with a significantly lower likelihood of use of the service. Ownership and having a home health agency were included in the model, but had no effect on use of services. State Medicaid payment methods for skilled nursing facility and home health services, also included in the model, had a significant influence on use.

SOURCE: ProPAC analysis of the MedPAR and National Claims History files from the Health Care Financing Administration.

B is a voluntary program, nearly all elderly and disabled persons eligible to enroll elect to participate in it. People with ESRD have a particular incentive to purchase Part B because it covers outpatient dialysis.

Total spending for Medicare has grown continuously since the program's implementation in 1966. In 1993, Medicare payments were an estimated $149 billion (see Table 3-15). This represents a 10.7 percent nominal increase and a 7.5 percent real increase over 1992 expenditures. Nominal spending per enrollee grew 8.6 percent in 1993.

Expenditure growth rates vary by type of service and reflect changes in Medicare's payment and coverage policies, as well as advances in technology and modifications to practice patterns. Part A program payments were about $95.7 billion in 1993, or 64 percent of total Medicare program disbursements (see Table 3-16). Hospital inpatient payments were $78.1 billion and accounted for 82 percent of Part A expenditures.

Spending for inpatient hospital services rose between 12 percent and 20 percent a year during the early 1980s. To control these growth rates, Medicare instituted the prospective payment system (PPS) in 1983 which, together with falling hospital admissions, contributed to a 6.2 percentage-point decline in the annual growth rate between 1984 and 1985. Inpatient spending surged between 1988 and 1989 as the Medicare Catastrophic Coverage Act (MCCA) relaxed coverage limitations for a year. In 1990, hospital spending returned to 7.8 percent nominal growth, or 2.3 percent real growth,

Table 3-13. Medicare-Covered Charges and Payments for Beneficiaries with Hip Fracture, by Post-Acute Care Use, 1990

Period of Use	Home Health Agency	Skilled Nursing Facility	Rehabilitation	No Use[a]	All Beneficiaries
Hospitalization for hip fracture[b]					
Charges	$16,390	$15,891	$16,484	$13,469	$15,230
Medicare payments	8,419	8,312	8,469	7,599	8,120
60 days before hospitalization					
Charges	2,869	2,763	2,893	1,974	2,457
Medicare payments	1,425	1,371	1,362	936	1,109
Six months after hospitalization					
Charges	10,534	13,769	10,909	6,766	10,228
Medicare payments	6,167	6,801	5,645	3,338	5,314
Total episode[c]					
Charges	26,924	29,660	27,393	20,197	25,458
Medicare payments	14,586	15,113	14,114	10,937	13,434

[a] Beneficiaries in this group may have received post-acute services in the hospital outpatient department or from an independent physical therapist, but did not receive Medicare-covered services from a skilled nursing facility, rehabilitation hospital, or home health agency.

[b] Includes all Medicare Part B services used during the hospitalization.

[c] Episode charges and payments are for the hospitalization and the subsequent six months.

SOURCE: ProPAC analysis of the MedPAR and National Claims History files from the Health Care Financing Administration.

but has continued to climb despite cost-containment efforts. Much of the growth is because of technological innovations that have changed the types of services being furnished and allowed hospitals to treat more complex and costlier cases. (See Chapter 1.)

Expenditures for post-acute care services have also grown rapidly during the last decade. This growth may be partly attributable to Medicare's cost-based payment policies, which impose relatively few constraints on payments to skilled nursing facilities and home health agencies. Medicare's coverage policies have also affected the growth in post-acute care expenditures. In 1988, nursing facility coverage guidelines were liberalized and spending rose 47.1 percent. In 1989, the three-day prehospitalization requirement for nursing facility coverage was removed; spending jumped 217.4 percent. When MCCA was rescinded in 1990, these expenditures fell substantially, although they have risen since.

Similarly, changes in Medicare's home health coverage policies have affected spending levels. During the mid-1980s, eligibility guidelines for home health care became more restrictive, resulting in fewer enrollees qualifying for the benefit and a drop in related spending. These guidelines were changed in 1987 after the Health Care Financing Administration (HCFA) received a court order to repeal the new interpretations. Between 1989 and 1993, spending for home health as a proportion of

Table 3-14. Total Medicare Enrollment, 1980-1994 (In Millions)

Year[a]	Number of People		
	Total	Aged	Disabled
1980	28.3	25.3	3.0
1981	28.8	25.8	3.0
1982	29.3	26.4	3.0
1983	29.9	26.9	3.0
1984	30.4	27.4	2.9
1985	31.0	28.0	2.9
1986	31.6	28.6	3.0
1987	32.2	29.2	3.0
1988	32.9	29.7	3.1
1989	33.5	30.3	3.2
1990	34.1	30.8	3.3
1991	34.8	31.4	3.5
1992	35.5	31.9	3.6
1993[b]	36.2	32.4	3.8
1994[b]	36.8	32.8	4.1

Note: Rows may not sum to the total due to rounding.

[a] As of July of the specified year.

[b] Estimated.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Table 3-15. Estimated Medicare Benefit Payments, 1980-1993

Year	Total		Per Enrollee	
	Payments (In Billions)	Percent Change	Payments	Percent Change
1980	$36.3	—	$1,285	—
1981	43.6	20.0%	1,513	17.8%
1982	51.1	17.0	1,740	15.0
1983	58.0	13.7	1,942	11.6
1984	65.1	12.1	2,142	10.3
1985	70.3	8.1	2,271	6.0
1986	75.8	7.8	2,400	5.7
1987	80.5	6.3	2,498	4.1
1988	86.8	7.8	2,641	5.7
1989	99.3	14.5	2,965	12.3
1990	109.2	9.9	3,200	7.9
1991	121.1	10.9	3,480	8.8
1992	134.6	11.1	3,791	8.9
1993	149.0	10.7	4,116	8.6

Note: Payments reported here are incurred expenditures rather than outlays.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Medicare's total expenditures grew almost threefold, from 2.6 percent to 7.4 percent.

Spending under Medicare's Part B program has also risen markedly. An estimated $53.3 billion went for Part B services in 1993, representing nearly a fivefold increase since 1980 (see Table 3-17). The increases in hospital outpatient spending have been significantly greater than those for inpatient hospital spending since 1980, except for 1989 when hospital coverage expanded temporarily under MCCA. Part of this growth stems from changes in Medicare's coverage policies that were concurrent with improvements in medical technology, which made ambulatory care a feasible alternative for many inpatient procedures.

The growth in payments for physician services began slowing by the early 1990s. Before Medicare froze physician payment levels in 1984, expenditures for physician services were climbing almost 20 percent a year. After the freeze was removed in 1986, spending accelerated again until the late 1980s, when the Congress authorized a Medicare Fee Schedule for physician services. The annual rate of growth in spending fell to 5.2 percent in 1993, although the physician payment reform system will not be fully implemented until 1996.

Growth rates in Medicare spending also differ by populations. Certain groups, such as those with ESRD, use costlier services and thus incur more expenditures per person. For example, the average program payment for a beneficiary with ESRD in 1991 was $33,700, nearly 10 times more than the average payment for other enrollees. Total expenditures for ESRD

Table 3-16. Estimated Medicare Part A Benefit Payments, by Type of Service, 1980-1993

Year	Total Part A		Inpatient		Skilled Nursing		Home Health Agency[a]		Hospice	
	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change
1980	$25.5	—	$24.5	—	$0.4	—	$0.8	—	$0.0	—
1981	30.7	20.7%	29.4	20.1%	0.5	9.5%	1.0	26.0%	0.0	—
1982	35.7	16.1	33.9	15.4	0.5	9.3	1.3	28.5	0.0	—
1983	39.9	11.8	37.8	11.3	0.5	6.7	1.6	26.6	0.0	—
1984	44.7	12.2	42.3	12.0	0.6	6.9	1.9	17.5	b	—
1985	47.4	6.0	44.9	6.1	0.6	2.9	1.9	4.0	b	—
1986	49.1	3.6	46.5	3.8	0.6	0.2	1.9	-0.5	0.1	79.1%
1987	49.7	1.2	47.1	1.2	0.6	8.8	1.9	-1.2	0.1	45.5
1988	52.2	5.0	49.1	4.2	0.9	47.1	2.1	8.6	0.2	39.3
1989	61.2	17.3	55.5	13.1	2.9	217.4	2.6	24.7	0.2	52.6
1990	66.7	9.0	59.8	7.8	2.6	-10.3	3.9	52.1	0.4	50.4
1991	74.6	11.8	65.7	9.9	2.6	-0.3	5.7	44.3	0.6	56.7
1992	85.2	14.3	72.5	10.2	4.1	54.5	8.0	39.8	0.8	50.8
1993	95.7	12.3	78.1	7.8	5.7	40.5	11.0	38.1	1.0	18.6

Note: Payments reported here are incurred expenditures rather than outlays.

[a] Includes the relatively small amount of Part B home health agency expenditures.

[b] Payments were $8 million in 1984 and $43 million in 1985.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Table 3-17. Estimated Medicare Part B Benefit Payments, by Type of Service, 1980-1993

Year	Total Part B		Physician		Outpatient	
	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change
1980	$10.9	—	$ 8.4	—	$ 1.9	—
1981	12.9	18.6%	10.1	19.4%	2.3	20.4%
1982	15.4	19.4	12.1	20.3	2.7	20.3
1983	18.2	18.0	14.2	17.6	3.2	18.4
1984	20.4	12.0	15.7	10.3	3.7	15.6
1985	22.9	12.5	17.2	9.7	4.4	16.8
1986	26.7	16.3	19.6	13.6	5.3	20.3
1987	30.8	15.6	22.2	13.3	6.2	18.0
1988	34.6	12.3	24.5	10.5	7.0	13.2
1989	38.2	10.3	26.8	9.5	7.6	8.6
1990	42.5	11.4	29.5	10.0	8.5	11.9
1991	46.6	9.5	31.6	7.1	9.8	14.3
1992	49.4	6.0	32.3	2.4	11.0	13.0
1993	53.3	7.9	34.0	5.2	12.2	10.7

Note: Payments reported here are incurred expenditures rather than outlays.

SOURCE: Health Care Financing Administration, Office of the Actuary.

benefits rose from 3.9 percent of total program payments in 1980 ($1.4 billion) to 5.1 percent in 1991 ($6.2 billion). Much of this growth is because enrollment of those with ESRD climbed from 0.2 percent in 1980 to 0.5 percent of the total Medicare population in 1991. Similarly, expenditures for the hospice population have increased dramatically. Although this benefit accounts for less than 1 percent of total Medicare dollars, spending on hospice care has skyrocketed by about 40 percent a year since 1987. This benefit, which was implemented in 1984, accounted for $1 billion in 1993.

Despite the growth in program payments, Medicare beneficiary liability has remained between 21.3 percent and 24.2 percent of total Medicare expenditures since 1980. Liability depends on the service and site of care, but usually includes deductibles and copayments, Part B premiums, and balance billing charges from physicians who do not accept program assignment (see Table 3-18).[11] For most services, the copayment is 20 percent of the approved costs or payment amount. However, beneficiary liability varies from 20 percent of charges for certain hospital outpatient services to nothing for home health visits.

Medicare's policies governing beneficiary liability have not changed substantially. While liability has increased slightly for hospital inpatient services, from 6.6 percent of total inpatient expenditures in 1980 to 8.1 percent in 1993, it has fallen in aggregate for all other services, from 42 percent of total Medicare expenditures to 32 percent (see Table 3-19.) This decrease may be partially due to the growing use of services that lack or limit beneficiary copayments, such as home health or physician services.

Medicaid

Medicaid is the second largest public payer, targeting low-income families, poor elderly, and disabled populations. Each state sets its own eligibility and coverage standards within guidelines established by the Federal government. The Federal government provides each state with a matching payment that ranges from 50 percent to 83 percent of its total Medicaid expenditures. Both the size of state programs and the restrictiveness of their eligibility policies vary.

The largest group of recipients are dependent children under 21, although most payments are for services to the elderly and blind (see Table 3-20). Per-person payments for services to these latter two groups average almost eight times those for younger populations. Hospital inpatient services and institutional services (not including services for the mentally retarded) constituted the largest payment categories in fiscal year 1993 (31 percent and

Table 3-18. Beneficiary Liability for Medicare-Covered Services Per Benefit Period

Benefit	Benefit Period	Beneficiary Out-of-Pocket Requirement
Hospitalization		
Semiprivate room and board, general nursing, and miscellaneous hospital services and supplies	First 60 days	$696 deductible
	61st to 90th days	$174 daily
	60 lifetime reserve days	$348 daily
	Beyond 150 days	All costs
Skilled nursing facility benefit		
In a facility approved by Medicare; beneficiary must have been in a hospital for at least three days and enter within 30 days after hospital discharge	First 20 days	None
	Additional 80 days	Up to $87 per day
	Beyond 100 days	All costs
Home health agency benefit		
Medically necessary skilled care, home health aide services, medical supplies, etc.	Part-time or intermittent nursing care and other services for as long as the beneficiary meets criteria for benefits	Nothing for services; 20% of approved amount for durable medical equipment
Hospice care		
Full scope of palliative medical and support services available to terminally ill	As long as doctor certifies need	Limited cost sharing for outpatient drugs and inpatient respite care
Blood	N/A	First three pints plus 20% of approved amount for additional pints (after $100 deductible)
Medical expense		
Physician's services, inpatient and outpatient medical and surgical services and supplies, physical and speech therapy, diagnostic test, durable medical equipment, etc.	N/A	$100 deductible, plus 20% of approved amount (plus any charge above approved amount)
Clinical laboratory services		
Blood, biopsies, urinalysis, etc.	N/A	Nothing for services
Outpatient hospital treatment		
Reasonable and necessary services for the diagnosis or treatment of an illness or injury	N/A	Subject to deductible plus 20% of approved amount

Note: N/A = not applicable.

SOURCE: Health Care Financing Administration and National Association of Insurance Commissioners, *1993 Guide to Health Insurance for People with Medicare.*

21 percent, respectively). Physician services, outpatient care, and prescription drugs accounted for another 17 percent of Medicaid's spending (see Table 3-21).

Total Medicaid expenditures almost tripled between 1987 and 1993, from $47 billion to an estimated $127 billion. Much of this growth was attributable to rising enrollment, particularly

Table 3-19. Estimated Beneficiary Liabilities, 1980-1993

Year	Total Medicare			Inpatient Hospital		Other Medicare	
	Beneficiary Liability (In Billions)	Program Expenditures (In Billions)	Beneficiary Share of Total Expenditures[a]	Beneficiary Liability (In Billions)	Beneficiary Share	Beneficiary Liability (In Billions)[a]	Beneficiary Share
1980	$10.3	$ 36.3	22.2%	$1.7	6.6%	$ 8.6	42.0%
1981	12.2	43.6	21.9	2.0	6.4	10.2	41.7
1982	14.7	51.1	22.3	2.7	7.3	12.0	41.2
1983	16.4	58.0	22.0	3.2	7.7	13.2	39.5
1984	18.3	65.1	21.9	3.4	7.4	14.9	39.6
1985	19.3	70.3	21.5	3.4	7.0	15.9	38.5
1986	21.3	75.8	22.0	4.1	8.2	17.2	37.0
1987	23.8	80.5	22.8	4.5	8.8	19.2	36.5
1988	27.7	86.8	24.2	4.8	8.9	22.9	37.8
1989	30.2	99.3	23.3	3.6	6.0	26.6	37.8
1990	33.3	109.2	23.3	5.5	8.4	27.8	36.0
1991	35.1	121.1	22.5	6.0	8.3	29.1	34.5
1992	36.7	134.6	21.4	6.4	8.1	30.3	32.8
1993[b]	40.3	149.0	21.3	6.9	8.1	33.4	32.1

[a] Medicare Part B premiums are included in total Medicare beneficiary liabilities. Total expenditures include program payments and beneficiary copayments.

[b] Estimates for 1993 are preliminary and subject to change.

SOURCE: Health Care Financing Administration, Office of the Actuary.

between 1990 and 1991, along with higher spending per enrollee.[12]

Several laws enacted in the late 1980s expanded coverage or drove up Medicaid spending. The Omnibus Budget Reconciliation Acts (OBRA) of 1986 and 1987, for instance, extended coverage to additional populations. OBRA 1986 also authorized coverage of Medicare copayments for qualifying recipients. This coverage was mandated in 1989, when the MCCA required states to cover these copayments and enlarged the eligibility groups. OBRA 1989 and 1990 further broadened the eligibility guidelines and mandated that physician payments should be sufficient to ensure service availability equal to the level found in the general population. In addition, states found new sources of revenue, using provider taxes and donations to augment their payment share for the Federal match until 1991, when the Congress limited this practice. The Congress further instructed states to improve their payments to disproportionate share hospitals, a

Table 3-20. Medicaid Recipients and Payments, by Type of Eligibility, 1992

Type of Eligibility	Recipients[a]		Payments[b]		
	Number (In Millions)	Percent	Amount (In Millions)	Percent	Amount Per Recipient
Total	31.2	100.0%	$91,480	100.0%	$2,932
Age 65 and over	3.7	11.9	29,089	31.8	7,862
Blind or disabled	4.5	14.4	34,004	37.2	7,556
Dependent children under age 21	15.2	48.7	14,758	16.1	971
Adults in families with dependent children	7.0	22.4	12,403	13.6	1,772
Other	0.6	1.9	1,053	1.2	1,755

Note: Percentages may not add to 100 because some recipients are classified in more than one category during the year and unknowns are excluded.

[a] Estimated.

[b] Payments are limited to vendor payments.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy, *1993 HCFA Statistics.*

Table 3-21. Estimated Medicaid Benefit Payments, by Type of Service, 1985-1993

Year	Total		Inpatient		Skilled Nursing/ Intermediate Care Facility*		Physician		Outpatient	
	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change
1985	$ 39.4	—	$ 9.8	—	$11.8	—	$2.5	—	$1.7	—
1986	42.5	7.9%	10.5	6.6%	12.5	6.2%	2.7	9.7%	1.9	10.5%
1987	47.0	10.4	11.5	9.8	13.6	8.2	3.0	9.9	2.1	9.8
1988	51.6	10.0	12.3	7.2	14.6	8.0	3.2	6.8	2.5	16.7
1989	58.6	13.6	14.1	14.3	15.7	7.0	3.6	12.0	2.7	9.6
1990	69.8	18.9	17.4	23.8	18.0	14.8	4.3	20.0	3.3	22.4
1991	88.4	26.7	25.7	47.7	20.8	15.8	5.4	26.5	4.3	29.9
1992	114.4	29.4	37.5	45.7	24.4	17.0	6.7	24.4	5.5	28.4
1993	126.6	10.7	39.6	5.5	26.1	7.2	7.4	10.0	6.3	13.3

* These payments do not include intermediate care for the mentally retarded.

SOURCE: Health Care Financing Administration, Medicaid Bureau.

move that increased spending for inpatient hospital services.[13]

In response to rising costs, many states have altered their payment policies, changing the eligibility criteria or the services covered, or limiting the prices paid for services. Other states refrain from offering optional service coverage. Many states have established managed care programs to control costs for their nonelderly populations or for services in specific locales.

Private Insurance

Almost 60 percent of the U.S. population receives health insurance through their employer. Another 6 percent have individually purchased private insurance.[14] Of those employers that provide coverage, many are limiting their costs by changing the types of plans they offer; increasing employees' shares of the premiums, copayments, and deductibles; or dropping benefits altogether. As a result, individual out-of-pocket spending has increased.

Employer-Based Coverage—Employers may offer a range of insurance options, although the distinctions between them have been blurring. Traditional indemnity plans typically pay for care on a fee-for-service (FFS) basis. Preferred provider organizations (PPOs) use managed care techniques, such as negotiated pricing methods and utilization review, to pay for services a patient actually receives. Individuals face higher out-of-pocket costs for using a non-PPO provider. At the other end of the continuum are health maintenance organizations (HMOs), which are usually paid a capitated amount for a comprehensive benefit package, regardless of actual service use. Like PPOs, some HMOs allow enrollees to use non-network providers under point-of-service options.

Although more employers offer traditional indemnity plans than managed care options, the number offering managed care plans grew between 1988 and 1993.[15] More than half of all workers were enrolled in such plans in 1993 (see Table 3-22). Employers' average annual costs in 1993 were lower for workers enrolled in managed care arrangements.

To control costs, managed care plans use several techniques that limit either provider payments or enrollee use. They curb their payments by using negotiated prices or establishing risk-sharing arrangements with providers. These agreements may restrict the enrollee's choice of providers to those involved in the contract, but they also tend to have lower employee cost-sharing requirements. In addition, managed care plans employ utilization review methods, such as preadmission certification or second opinion requirements, to curtail inappropriate use. However, all plan types, including conventional indemnity plans, are increasingly incorporating utilization management techniques into their insurance coverage (see Table 3-23). As a result, the distinctions between plan types are diminishing.

Table 3-22. Employer-Based Health Insurance Costs and Coverage, by Type of Plan, 1993

Type of Plan	Average Cost Per Employee[a]	Employers Offering Coverage[b] (In Percent)	Enrolled Employees[c] (In Percent)
Indemnity	$3,500	57%	48%
HMO	3,276	22	19
PPO	3,317	24	27
Point of service	3,266	4	7

Note: HMO = health maintenance organization. PPO = preferred provider organization.

[a] Cost is defined as total annual medical plan claims and administrative costs, excluding dental care, for active and retired employees and their dependents divided by the number of active covered employees. This excludes employer tax contributions and employee out-of-pocket costs.

[b] Column may exceed 100 percent due to employers offering more than one plan.

[c] Percentages may not add to 100 due to rounding.

SOURCE: Foster Higgins, *National Survey of Employer-Sponsored Health Plans*, 1993.

Service use is different for managed care enrollees than for those in fee-for-service arrangements. The overwhelming evidence is that HMO enrollees use fewer and different services. In 1991, HMO members had fewer inpatient hospital discharges and inpatient days per 1,000 enrollees than the national average (see Table 3-24). For certain discretionary surgical procedures, they also had lower use rates than the national average (see Table 3-25). However, HMO enrollees typically visited physicians and other practitioners more frequently than the average American.[16] These differences may be because HMOs enroll healthier patients. One study showed that elderly enrollees in managed care arrangements were healthier than their fee-for-service counterparts.[17]

In 1993, 42.1 million people were enrolled in 566 HMOs (not including 89 specialty HMOs). Enrollment was highest in independent practice association (IPA) models (see Figure 3-1). These models may be more attractive to enrollees because they are less structured, often using providers who are in solo practice. Another 54.4 million people were enrolled in 895 PPOs.

Regardless of the type of health plan they offer, employers are contributing a smaller proportion of the total premiums, especially for individual coverage. Across all firms, the employer premium contribution for individual health coverage in fee-for-service plans dropped from 90 percent in 1988 to 82 percent in 1993. For HMOs, it fell from 91 percent in 1988 to 78 percent in 1993, and for PPOs it declined from 90 percent in 1988 to 76 percent in 1993.[18] As a result, employees are responsible for a greater share of total health insurance premiums.

People are also paying higher deductibles for FFS and PPO benefits. (The deductible is the amount a plan member must cover out of pocket before the insurer will begin to pay for medical services.) Between 1989 and 1993, FFS deductibles increased 59 percent, PPO deductibles rose 83 percent, and deductibles for services provided outside the PPO provider network went up 112 percent.[19]

In addition to the deductible, employees may be charged coinsurance, or a fixed percentage of the plan's payment. Between 1988 and 1993, coinsurance rates changed little for FFS plans and PPO plans in which the member saw a plan provider. In 1993, the majority of employees in FFS plans (89 percent) still had a coinsurance rate of 20 percent

Table 3-23. Employees Subject to Utilization Management, by Type of Plan, 1991 (In Percent)

Utilization Management Activity	Indemnity	Preferred Provider Organization	Point of Service
Preadmission certification	80%	90%	85%
Concurrent utilization review	71	84	84
Mandatory second opinion for surgery	46	53	55
Case management for large claims	71	87	89
Incentives for ambulatory surgery	39	48	48
Penalty for nonurgent emergency room care	35	43	69

SOURCE: Health Insurance Association of America, 1991 Employer Survey.

Table 3-24. Differences in Utilization Rates, 1987 and 1991

Year	Discharges Per 1,000 Population			Days Per 1,000 Population			Average Length of Stay (In Days)		
	Under Age 65	Age 65 and Over	All Enrollees	Under Age 65	Age 65 and Over	All Enrollees	Under Age 65	Age 65 and Over	All Enrollees
1987									
HMO	70.5	232.3	81.9	314	1,633	398	4.5	7.1	4.9
Nation	108.3	350.0	161.8	588	3,030	889	5.2	8.6	6.4
1991									
HMO	61.9	217.9	81.4	251	1,348	379	4.1	6.2	4.4
Nation	92.8	340.3	124.1	486	2,927	795	5.2	8.6	6.4

Note: HMO = health maintenance organization. The HMO utilization rates shown here are means weighted by enrollment.

SOURCE: Group Health Association of America, *HMO Industry Profile, 1993.*

or less. For employees who used network physicians in PPO plans, 86 percent had a coinsurance rate of 20 percent or less. However, for 53 percent of the PPO members who chose to use a non-PPO provider, coinsurance rates either varied or were more than 20 percent.

Self-insurance is another technique employers use to contain their spending. In a self-insured plan, the employer or union assumes all or most of the risk for paying claims. While insurance companies often administer them, self-funded plans are exempt from paying state premium taxes and having to maintain reserve funds. Furthermore, because of the Employee Retirement Income Security Act of 1974, self-insured employer plans are exempt from providing state-mandated benefits, which can increase costs.[20]

Employers are increasingly adopting self-funded health insurance plans. In 1986, roughly 46 percent of the employers participating in the Foster Higgins health benefits survey had self-funded plans. By 1991, this had risen to 65 percent.[21] The Health Insurance Association of America (HIAA) annual employer survey indicated that in 1991, 40 percent of private sector, state, and local government employees were in self-funded plans. By 1992, 44 percent of private sector employees were enrolled in these plans. (Local and state government employees were excluded from the survey.)[22]

To contain their health care spending further, employers are restricting the benefits they offer. As

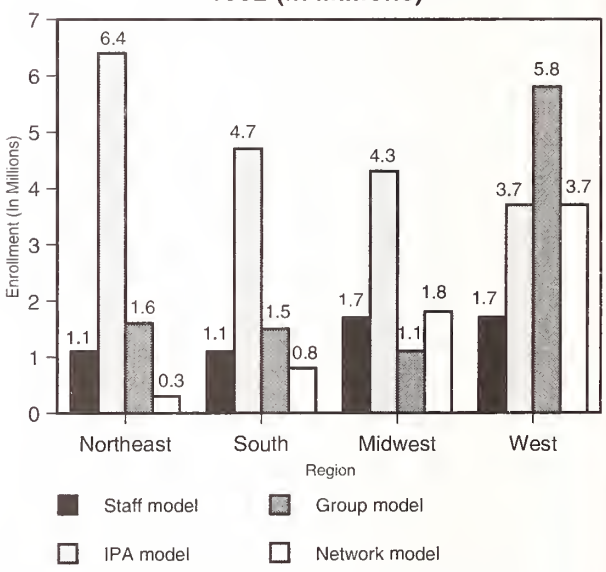
Table 3-25. Utilization Rates for Selected Procedures for People 65 or Older, 1991

Procedure	HMO	U.S. Total
Coronary artery bypass	333	650
Cardiac catheterization	852	1,405
Cholecystectomy	383	582

Note: HMO = health maintenance organization. HMO rates are per 100,000 enrollees, U.S. total rates are per 100,000 population.

SOURCE: Group Health Association of America, *HMO Industry Profile, 1993.*

Figure 3-1. Health Maintenance Organization Enrollment, by Model Type and Region, 1992 (In Millions)



Note: Model type reflects primary model for health maintenance organizations (HMOs), although many HMOs offer more than one model type. IPA = independent practice association.

SOURCE: Group Health Association of America.

they become more concerned about spiraling health care costs and their firm's future liability for retirement benefits, employers are less likely to offer these benefits. About 52 percent offered employees 65 and over retirement coverage in 1992, down from 64 percent in 1987.[23]

The trend toward reducing post-retirement health insurance benefits is affecting general retirement patterns. Employees are less likely to retire early if their employer does not offer coverage before they become eligible for Medicare. For example, the average retirement age in firms offering benefits to the under-65 population is 62, while in other firms it is 64.[24]

Employers are also modifying the cost-sharing requirements in retirement packages. Those that are continuing to offer such coverage are transferring more of the cost to retirees (see Table 3-26). Retirees—particularly those under 65—are more likely to have to pay premium contributions than active workers. Further, their contributions are almost three times as high as those of active employees.

Medigap Insurance—Medigap policies are purchased by individuals to cover Medicare's cost-sharing requirements. They may include benefits beyond those offered by Medicare. Legislation was enacted in 1980 to ensure that these policies did not duplicate Medicare coverage. Medigap policies are now regulated under Section 1882 of the Social Security Act, known as the Baucus Amendment.

Recently, medigap policies have been simplified so that they can be easily compared across insurers. These policies must conform to one of 10 standard benefit plans developed by the National Association of Insurance Commissioners. Each of these includes a core set of benefits and various combinations of additional benefits (see Table 3-27). The price of the policy varies depending on the additional benefits offered.

Table 3-26. Employee Contributions to Indemnity-Based Insurance, 1992

Employee Category	Firms Requiring Contribution (In Percent)	Average Contribution (Percent of Premium)
Active	59%	19%
Retired		
Under age 65	68	52
Age 65 and over	57	52

SOURCE: Adapted from Foster Higgins Health Care Benefits Survey, 1992.

According to one association survey, the most frequently purchased medigap plan (bought by 33 percent of the enrollees) covered Medicare's skilled nursing facility coinsurance, hospital and physician deductibles, 100 percent of the balance billing charges, and foreign travel. The second most commonly sold policy (bought by 25 percent) offered the same benefits but excluded coverage for physician balance billing. Monthly premiums in 1994 ranged from $38.90 to $133.87. The average monthly premium was $78.47.[25]

CHANGES IN THE DELIVERY SYSTEM: THE EFFECT ON ACCESS AND QUALITY

Americans have access to a wide variety of quality health care services. This access is made possible by the range of providers and their presence in urban and rural areas, as well as the availability of health insurance coverage to shield people from the financial risks of major illness. Quality is monitored through mandatory and voluntary efforts. Although the ability to assess the outcomes of care is limited, efforts are under way to implement such measures.

Access to quality health care has never been uniform across geographic areas, however. Providers are more available in some locales than in others. In addition, significant numbers of people lack health insurance or other financial means to obtain care. As for quality assurance, mechanisms are not applied to all providers, particularly new ones. While these gaps in access to services and quality assurance measures are the focus of many health reform proposals, they may also be exacerbated by possible spending changes. As attention focuses increasingly on controlling rising costs, efforts to expand access or improve quality may be undermined.

Changes in the structure and financing of the delivery system may be affecting both access and quality of care. These effects differ by population

Table 3-27. Medigap Coverage Options

Options	A	B	C	D	E	F	G	H	I	J
Basic benefits[a]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Skilled nursing home[b]			✓	✓	✓	✓	✓	✓	✓	✓
Hospital deductible[c]		✓	✓	✓	✓	✓	✓	✓	✓	✓
Doctor deductible[d]			✓			✓				✓
Excess doctor charges[e]						100%	80%		100%	100%
Foreign travel[f]			✓	✓	✓	✓	✓	✓	✓	✓
At-home recovery[g]				✓			✓		✓	✓
Prescription drugs[h]								i	i	j
Preventive screening[k]					✓					✓

[a] Basic benefits = Medicare Part A coinsurance for 61st through 90th day of hospitalization and for the 60 non-renewable lifetime reserve days. Coverage for 100% of Part A hospital expenses limited to a maximum of 365 days during the policyholder's lifetime. Coverage of the first three pints of blood or equivalents. Part B coinsurance after $100 annual deductible is met.

[b] Skilled nursing home = skilled nursing facility care coinsurance.

[c] Hospital deductible = Part A inpatient deductible.

[d] Doctor deductible = Part B deductible.

[e] Excess doctor charges = percentage of the difference between Medicare's approved amount for Part B services and the actual charges.

[f] Foreign travel = medically necessary emergency care in a foreign country.

[g] At-home recovery = up to $1,600 per year for short-term, at-home assistance with activities of daily living.

[h] Prescription drugs = after $250 annual deductible, 50% of the cost of prescription drugs up to a limit. The limit varies for the basic and extended benefits.

[i] Basic ($1,250 annual limit).

[j] Extended ($3,000 annual limit).

[k] Preventive screening = up to $120 per year for preventive medical care (physical examination, flu shot, serum cholesterol screening, hearing test, diabetes screenings, and thyroid function test).

SOURCE: Health Care Financing Administration and National Association of Insurance Commissioners, *1993 Guide to Health Insurance for People with Medicare.*

group and region. It may take longer for people living in rural areas to have access to new technologies and procedures, for instance, since these are usually first adopted in large urban hospitals. Payer policies may also be creating access barriers by limiting who is eligible and what services will be covered.

Access to Care

In 1993, there were an estimated 37 million uninsured people in the United States.[26] The uninsured are less likely to receive medical services, despite their inferior health status. In 1987, 62.4 percent of the uninsured nonelderly used medical services, compared with 86.4 percent of their privately insured counterparts. Similarly, 95.1 percent of the population with Medicare and private supplemental insurance used services, compared with 85.8 of the elderly covered only by Medicare.[27] When hospitalized for the same condition, the uninsured have consistently shorter lengths of stay than the privately insured. In addition, the uninsured have higher abnormal biopsy rates for cancer, suggesting they are less likely to be screened. The uninsured also are at greater risk of suffering medical injury caused by substandard medical care. Both the uninsured and Medicaid recipients have higher rates of hospitalization for conditions that can often be treated out of the hospital or avoided altogether.[28]

Although Medicare covered nearly all the elderly and some 3.9 million disabled persons in 1993, beneficiaries still faced financial barriers to care. Data from the Current Beneficiary Survey, which

HCFA conducts to monitor Medicare enrollees, supports this. Despite the lower perceived health status of enrollees who were not covered by medigap policies or by Medicaid, they used fewer services.[29] In 1991, for instance, 33 percent of those with Medicare only used no services, compared with 13 percent of those who had supplemental private insurance and 9.3 percent who were dual-eligibles (covered by both Medicare and Medicaid).

Further, regardless of their insurance coverage, certain subgroups experience different access to health care. People living in rural areas of the United States must travel farther to receive tertiary care and high-technology services. As of September 30, 1993, almost 43 million people lived in rural areas that were deemed Health Profession Shortage Areas.[30] Rural areas rely more on general practitioners because they have fewer specialists and allied health professionals.[31]

The supply and use of post-acute care also vary across populations. Rural Medicare enrollees, for example, are less likely to receive medical social services or therapeutic home health visits.[32] They are more likely to use the Medicare skilled nursing facility benefit, however, probably because of the swing-bed program, which allows small rural hospitals to use some beds as nursing facility beds.[33]

Rural and urban groups may have different types of access problems. In 1987, rural residents on average were more likely to be hospitalized or to buy a prescribed medicine than were inner-city residents, who live closest to the most sophisticated medical facilities.[34] Urban residents may actually have other barriers to care related to lack of transportation or traffic problems. For example, one study of mortality from cardiac arrest found that in New York City deaths were much higher in the inner city than in outlying areas because of traffic problems, lack of bystander interventions, and possibly sociodemographic factors, like race or income.[35]

Quality of Care

In light of the current emphasis on expenditure control, it is critical to evaluate what services are necessary and appropriate. Generally, Americans regard the quality of care they receive as quite good overall.[36] In one 1990 survey, about 93 percent of respondents considered their care of good quality, while only about 6 percent thought it was inadequate.

Quality of care varies by provider, place of service, ability of the patient to pay, and many other factors. It also may be affected by underutilization or overutilization of services. Studies of mortality rates at different hospitals, for instance, have concluded that some providers furnish poorer care than others.[37] Other studies show that, compared with privately insured persons, Medicaid recipients and the uninsured receive different tests and different treatments for the same conditions.[38] The quality of care provided, then, is far from uniform across all population groups and providers, although identifying which groups receive the best care is often difficult.

The frequency of unnecessary procedures is another measure of quality. Recent research has investigated rates of unnecessary procedures in the United States.[39] The results vary considerably, depending on the procedures and populations studied. In New York State, for example, 4 percent of all coronary angiographies performed during 1990 were determined to be inappropriate; the appropriateness of another 20 percent was questionable.[40] Other studies found that 17 percent of these procedures performed on the elderly population were inappropriate. Similarly, a large number of percutaneous transluminal coronary angioplasties in 1990 were judged to be performed for uncertain reasons.[41]

Data on appropriateness of services are limited, however. Such studies are expensive and require a panel of experts to determine when the procedure is indicated. For most conditions, there is no strong consensus about what constitutes appropriate treatment, although there is a growing movement to create clinical practice guidelines at the Agency for Health Care Policy and Research and other Federal and private institutions. There is general agreement that some services are overutilized or used inappropriately, while others are underutilized, especially by disadvantaged populations. The goal of many quality assurance programs is to encourage the use of appropriate services and discourage the use of inappropriate ones.

Public Sector Quality Assurance Efforts—Just as quality of care varies across population groups,

facilities, and other providers, so too do mechanisms of quality assurance. There are no uniform, national standards of quality that apply to all payers, providers, and facilities. Along with the proliferation of new types of providers comes a concern about the quality of care delivered in these sites. Because of the rapid emergence of these providers, traditional external quality review mechanisms have not been established. Further, even though there may be no concern about the quality of care delivered at these sites at this time, quality may deteriorate as the market creates stronger incentives to cut costs.

External review programs are used by three types of entities to ensure that quality of care delivered at different sites is adequate. Medicare certifies many facilities and uses the Peer Review Organization (PRO) program to monitor hospital care, states license facilities and professionals, and private entities conduct voluntary accreditation.

Through its certification requirements, the Medicare program has set minimum health and safety standards for services provided by hospitals; skilled nursing facilities; home health agencies; clinical laboratories; and a number of ambulatory care providers (ambulatory surgery centers, comprehensive outpatient rehabilitation facilities, and dialysis facilities). Providers must be certified as having met these minimum standards to participate in the Medicare program. Federal and state employees annually survey facilities to make certain they comply with regulatory requirements before they are certified.

The standards for nursing homes and clinical laboratories have recently been strengthened to address quality concerns. OBRA 1987 instituted nationally uniform staffing and training standards for nursing homes and reoriented the survey process to focus on quality of care issues. The Clinical Laboratories Improvement Act (CLIA) of 1988 set national standards for quality assurance methods and staffing in laboratories, including those in physician offices. However, the CLIA standards are still being implemented as HCFA addresses the problems of annually surveying about 200,000 laboratories, 130,000 of which are in physician offices.

HCFA also contracts with PROs to conduct quality and utilization reviews for hospitalized Medicare beneficiaries. PROs examine medical records to determine whether Medicare should pay for services that have been provided or are proposed. This decision is based on medical necessity, reasonableness, and appropriateness of placement at an acute level of inpatient care. In addition, PROs decide whether services were reasonable or necessary, whether they could have been provided more effectively on an outpatient basis or in a non-PPS hospital facility, and whether the quality meets professionally recognized health care standards. Reviews, however, are not limited to these purposes.

At the state level, certain types of health care providers must be licensed to practice. Many states require this, thereby imposing minimum standards for quality to protect citizens' health and safety. State licensure requirements vary greatly as to the types of providers required to have a license and the standards against which they are measured. The existence and scope of these requirements can affect the cost and quality of care delivered across states.

State licensure and Medicare certification standards often overlap. Licensing standards can be the same as Medicare's, less stringent, or more so. For instance, of the 38 states that license ASCs, only one has standards for medical staff training that are more rigorous than Medicare's. However, 32 of the 38 states have training requirements for staff types that Medicare does not regulate. Because state licensing standards are base requirements that a provider must meet to operate whether or not the provider is going to participate in Medicare, the provider must, at a minimum, always meet these. States are most likely to license providers for which there is currently a Federal review mechanism (that is, Medicare certification). All states license hospital outpatient departments and nursing facilities (see Table 3-28). Most states license ASCs and 38 states license HHAs. On the other hand, only 10 states license CORFs.

Few states license providers that are not subject to Medicare certification. Only a handful (four to six states) license free-standing cancer centers, diagnostic imaging centers, lithotripsy centers, or cardiac catheterization centers. The lack of an external review mechanism does not imply that patients are receiving poor quality care. It simply indicates the absence of an external mechanism, in

Table 3-28. Quality-Oriented Review of Non-Acute Providers

Provider Type	Medicare-Certified	Number of States with Licensure Regulations
Home health		
Home health agencies	Yes	38
Free-standing home infusion providers	No	0
Long-term care		
Skilled nursing facilities	Yes	51
Ambulatory care		
Ambulatory surgery centers	Yes	42
Ambulatory care centers	No	10
Comprehensive outpatient rehabilitation facilities	Yes	10
Hospital outpatient departments	Yes	51
Free-standing cancer centers	No	6
Free-standing cardiac catheterization centers	No	4
Free-standing diagnostic imaging centers	No	5
Free-standing dialysis centers	Yes	17
Free-standing lithotripsy centers	No	4
Independent clinical laboratories	Yes	23
Physician offices	No	0
Recovery centers	No	0

SOURCE: Adapted from Abt Associates, Inc., *Quality-Oriented Regulatory Requirements: Final Report*, ProPAC Extramural Report, forthcoming.

the form of government regulations, for standards believed to be prerequisites for providing quality care at these sites.

Private Sector Quality Initiatives—Along with Federal and state mechanisms to license and monitor quality of care in facilities, private sector health providers and insurers are increasingly developing initiatives designed to measure and improve quality. These include the HMO Employer Data and Information Set, developed by the National Committee for Quality Assurance, as well as state and industry initiatives, such as the Minnesota Reporting Standards for Health Care Utilization Data. Tools used to measure health status in generally healthy populations have also been developed, such as the SF-36 short-form health survey developed in the RAND medical outcomes study, which has been used in a variety of settings.[42] The Joint Commission on Accreditation of Healthcare Organizations has also changed its quality review emphasis, setting up its clinical indicator development project to test measures of process and outcomes thought to be linked to quality of care.

Hospitals are also instituting internal quality assurance programs. Data from a survey of hospitals sponsored by the Prospective Payment Assessment Commission (ProPAC) indicates that in 1993, 77 percent of hospitals had some form of continuous quality improvement or total quality management program in place. Only 33 percent, however, were run by a member of the medical staff.

Providers—particularly hospitals and physician group practices—are also examining physician practice patterns, primarily by a method called profiling. Rates of behaviors of individual physicians are compared either across providers or to some benchmark standard. Processes of care—the use of tests and procedures or the number of patients admitted to the hospital, for example—can be compared, as well as outcomes such as rehospitalization rates or mortality following specific procedures. About 52 percent of hospitals reported generating profiles on costs or practice patterns of individual physicians; about three-quarters shared the results with doctors. These programs are relatively new: 84 percent were launched during the past three years.[43]

Various types of physician profiling are being instituted. According to a study conducted by the American Medical Association, 39 percent of physicians were subject to clinical profiling in 1992, 22.4 percent to economic profiling

(examining expenditure or cost patterns of physicians), 45.5 percent to either, and 16 percent to both.[44] Pediatricians were most often profiled on clinical factors (45 percent), and pathologists were least often profiled (35.2 percent). Clinical profiling was more common for physicians in the West than in the South and among physicians with HMO, IPA, or PPO contracts. Fewer than half of profiled physicians, however, received feedback on the resulting information; it was collected by a central source, either a facility or payer, but not shared with the doctor.[45]

Ambulatory facilities are accredited on a voluntary basis. However, the percentage of these facilities nationwide that seek such external review varies substantially (see Table 3-29). Significantly, less than 1 percent of ambulatory care facilities, physician offices, recovery centers, and home infusion providers seek any external accreditation.

Today, substantial time and money are being spent on determining how to measure and monitor quality of care. Measurement of quality, however, is in its infancy, and data systems that can be used to compare health care across all providers, insurers, and population groups have yet to be developed. Insurers are collecting information on providers to determine which are more cost effective and incorporating this information into preferred provider programs and profiling activities.

CONCLUSIONS

The health care environment faced by the American public differs profoundly from that of the past and continues to change at an accelerating pace. Never before have there been as many choices of providers, sites of care, and medical technologies. Advances in technology have reduced recovery times, made sophisticated equipment more affordable for providers not affiliated with hospitals,

Table 3-29. National Accreditation of Non-Medicare-Certified Ambulatory Care Providers, 1993

Provider Type	National Accrediting/ Certifying Organization	Percent Reviewed/ Accredited
Ambulatory care centers	JCAHO	< 1%
	AAAHC	< 1
Free-standing cancer centers		
Comprehensive cancer centers	JCAHO	< 1
	American College of Surgeons	79
Radiation oncology centers	American College of Radiology	9
Free-standing cardiac catheterization centers	PRO review	90
	JCAHO	28
Free-standing diagnostic imaging centers		
Imaging centers	JCAHO	< 1
Mammography centers	American College of Radiology	63
Free-standing lithotripsy centers	JCAHO	< 1
	American Lithotripsy Society	30
Recovery centers	AAAHC	< 1
	JCAHO	< 1
Physician offices	AAAHC	< 1
	JCAHO	< 1

Note: JCAHO = Joint Commission on Accreditation of Healthcare Organizations. AAAHC = Accreditation Association of Ambulatory Health Care. PRO = Peer Review Organization.

SOURCE: Adapted from Abt Associates, Inc., *Quality-Oriented Regulatory Requirements: Final Report*, ProPAC Extramural Report, forthcoming.

and allowed numerous complex procedures to be performed outside of hospital inpatient settings. There have also been dramatic increases in the use of post-acute services, partly as a substitute for inpatient hospital days but also to provide new types of rehabilitation services. Further, new diagnostic and therapeutic technologies are increasingly available in the ambulatory setting.

Health care expenditures have grown because of increasing intensity and complexity of services provided as well as liberalized coverage policies. While the use of inpatient hospital services has decreased, hospital care continues to be the major component of national health spending. Payers' attempts to control hospital spending have contributed to the greater supply and use of ambulatory and post-acute services.

In response to higher use and costs, payers are changing their payment methodologies, imposing restrictions on types and sites of care, increasing beneficiary cost sharing, and trying to persuade providers to be more cost effective. These restrictions are reducing many individual choices of provider, site, or service. Thus, while the health delivery system is becoming more diverse, an individual's access to particular providers or services may be more constrained.

Managed care arrangements are being offered more frequently by employers. To induce employees to enroll in them, employers are providing incentives like lower copayments.

In addition, even though the entire delivery system is evolving, change is not uniform across geographic areas or population groups. Rural hospitals tend to acquire new technologies later than large inner-city institutions and do not have the physician or population base to support many of the alternative types of ambulatory facilities. More than 42 million people live in Health Profession Shortage Areas that lack an adequate supply of physicians. Further, a growing number of uninsured people face financial barriers to access for many needed services.

As for quality assurance, it has not kept pace with the proliferation of providers and facilities. Although the Federal government certifies hospitals and nursing facilities to participate in Medicare, many new types of facilities are not subject to Federal or state certification processes, nor do they undergo voluntary certification. Additionally, despite the emphasis that public and private sectors place on quality assurance, the methods for determining and monitoring quality are not well developed. Thus, even though it is critical to evaluate how various expenditure control strategies affect quality of care, the ability to do so is still limited.

Health reform, whatever the outcome, will be imposed on a constantly changing delivery system, one that will continue to diversify even as payers try to restrain their spending. ProPAC will monitor these changes and evaluate their potential effects on service use, health care spending, access to care, and quality of care.

Notes to Chapter 3

1. Board of Trustees, Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, *1994 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds*, Washington, DC, 1994.

2. Beth Hahn and Doris Lefkowitz, *Annual Expenses and Sources of Payment for Health Care Services,* National Medical Expenditure Survey Research Findings 14, AHCPR Pub. No. 93-0007 (Rockville, MD: U.S. Public Health Service, November 1992).

3. U.S. Department of Health and Human Services, National Center for Health Statistics, *Health, United States, 1992*. DHHS Pub. No. (PHS) 93-1232 (Hyattsville, MD: U.S.Public Health Service, August 1993).

4. *Health, United States, 1992*, Table 98.

5. Note that data in Tables 3-4 and 3-5 are not comparable because ambulatory surgery facilities in Table 3-4 may be affiliated with a hospital, while those in Table 3-5 are independent. Because the data in Table 3-4 pertain only to providers certified by the Medicare program, they underestimate the total number of facilities.

6. "1992 Stats Show Continued Growth in Programs and Patients," *NHO Newsline* 3(16):1-2, October 1993.

7. *Health, United States, 1992,* Table 78.

8. Prospective Payment Assessment Commission, *End-Stage Renal Disease Payment Policy,* Congressional Report C-92-04, June 1992; Richard A. Rettig and Norman G. Levinsky, *Kidney Failure and the Federal Government* (Washington, DC: National Academy Press, 1991).

9. Employee Benefit Research Institute, *Sources of Health Insurance and Characteristics of the Uninsured,* Issue Brief Number 145, January 1994.

10. To qualify for Medicare, disabled persons must have been receiving Social Security cash disability benefits for at least 24 months, or have ESRD and be a Social Security beneficiary, or be the dependent spouse or child of such a beneficiary or of an insured worker.

11. Physicians who do not accept Medicare assignment may charge the beneficiary up to 115 percent of the allowed Medicare charges, with 80 percent of the allowed charges paid by Medicare. Physicians who accept assignment receive the Medicare-allowed payment as payment in full and may not charge the beneficiary any additional amount. After the $100 deductible is met, 80 percent is paid by Medicare and 20 percent by the beneficiary.

12. Stephen Long, "The Causes of Soaring Medicaid Spending, 1988-1991," paper commissioned by the Kaiser Commission on the Future of Medicaid, July 1992.

13. See Prospective Payment Assessment Commission, *Analysis of Medicaid Disproportionate Share Payment Adjustments,* Congressional Report C-94-01, January 1994, for a complete discussion of this issue.

14. Congressional Budget Office estimates based on data from the Current Population Survey conducted by the Bureau of the Census, Department of Commerce, March 1993.

15. KPMG Peat Marwick, *Health Benefits in 1993* (Washington, DC: KPMG Peat Marwick, 1993).

16. Group Health Association of America, *HMO Industry Profile,* 1993 edition (Washington, DC: GHAA, November 1993)39.

17. Randall Brown and others, *The Medicare Risk Program for HMOs—Final Summary Report on Findings from the Evaluation* (Princeton, NJ: Mathematica Policy Research, Inc., February 1993).

18. KPMG Peat Marwick, *Health Benefits in 1993.*

19. Ibid.

20. Employee Benefit Research Institute, *Features of Employer-Sponsored Health Plans*. Issue Brief Number 128, August 1992.

21. Johnson & Higgins, *Corporate Health Care Benefits Survey 1986* (Princeton, NJ: Johnson & Higgins, 1986): A. Foster Higgins & Co., Inc., *Health Care Benefits Survey 1991, Report 1, Indemnity Plans: Cost, Design and Funding* (Princeton, NJ: A. Foster Higgins & Co., Inc., 1992).

22. Marianne Miller and Thomas Dial, *Employer-Sponsored Health Insurance in Private Sector Firms in 1992* (Washington, DC: HIAA, 1993); Cynthia Sullivan, Marianne Miller, and Claudia Johnson, *Employer-Sponsored Health Insurance in 1991* (Washington, DC: HIAA, 1992).

23. A. Foster Higgins & Co., Inc., *1992 Health Care Benefits Survey, Report 2, Retiree Health Care* (Princeton, NJ: A. Foster Higgins & Co., Inc., 1993).

24. Ibid.

25. These data were collected by the American Association of Retired Persons at ProPAC's request.

26. Employee Benefit Research Institute, *Sources of Health Insurance and Characteristics of the Uninsured*.

27. Hahn and Lefkowitz, *Annual Expenses and Sources of Payment.*

28. Dorothy P. Rice, "Ethics and Equity in U.S. Health Care: the Data." *International Journal of Health Services* 21(4):637-51, 1991; Jack Hadley, Earl P. Steinberg, and Judith Feder, "Comparison of Uninsured and Privately Insured Hospital Patients," *Journal of the American Medical Association* 265(3):374-79, January 16, 1991; Michael Millman, editor, *Access to Health Care in America*, Institute of Medicine (Washington, DC: National Academy Press, 1993); and Howard E. Freeman and others, "Americans Report on Their Access to Health Care," *Health Affairs* 6(1):6-18, Spring 1987.

29. Marian Gornick, "Physician Payment Reform Under Medicare: Monitoring Utilization and Access," *Health Care Financing Review* 14(3):77-96, Spring 1993; George Chulis and others, "Health Insurance and the Elderly: Data from MCBS," *Health Care Financing Review* 14(3):163-81, Spring 1993.

30. Health Profession Shortage Areas are eligible to have National Health Service Corps physicians placed in their communities if they lack an adequate supply of medical providers. U.S. Public Health Service, Health Resources and Services Administration, Division of Shortage Designations, personal communication, March 11, 1994.

31. U.S. Congress, Office of Technology Assessment, *Health Care in Rural America*, OTA-H-434 (Washington, DC: U.S. Government Printing Office, September 1990)247.

32. Prospective Payment Assessment Commission, *Interim Analysis of Payment Reform for Home Health Services*, Congressional Report C-94-02, March 1994.

33. Lisa Dubay, "Comparison of Rural and Urban Skilled Nursing Facility Benefit Use," *Health Care Financing Review* 14(4):25-37, Summer 1993.

34. Hahn and Lefkowitz, *Annual Expenses and Sources of Payment.*

35. Gary Lombardi, John Gallagher, and Paul Gennis, "Outcomes of Out-of-Hospital Cardiac Arrest in New York City," *Journal of the American Medical Association* 271(9):678-83, March 2, 1994.

36. Robert J. Blendon and others, "Satisfaction With Health Systems in Ten Nations," *Health Affairs* 9(2):185-92, Summer 1990.

37. Edward L. Hannan and others, "Adult Open-Heart Surgery and Hospital Mortality Rates," *Journal of the American Medical Association*, 264(21):2768-74, December 5, 1990; Catherine Borbas, Daniel B. McLaughlin, and Alvin Schultz, "The Minnesota Clinical Comparison and Assessment Program," paper delivered at

the Eighth Annual Meeting of the American Medical Review Research Center, Crystal City, Virginia, May 1993.

38. Jack Hadley and others, "The Association of Payer with Utilization of Cardiac Procedures in Massachusetts," *Journal of the American Medical Association* 264(10):1255-60, September 12, 1990; Rice, "Ethics and Equity"; Hadley, Steinberg, and Feder, "Comparison of Uninsured and Privately Insured Hospital Patients."

39. Lucian L. Leape and others, "The Appropriateness of Use of Coronary Artery Bypass Graft Surgery in New York State," *Journal of the American Medical Association* 269(6):753-60, February 10, 1993; Lee H. Hillborne and others, "The Appropriateness of Use of Percutaneous Transluminal Coronary Angioplasty in New York State," *Journal of the American Medical Association* 269(6):761-65, February 10, 1993; Stephen C. Schoenbaum, "Toward Fewer Procedures and Better Outcomes," *Journal of the American Medical Association* 269(6):794-96, February 10, 1993.

40. Steven J. Bernstein and others, "The Appropriateness of Use of Coronary Angiography in New York State," *Journal of the American Medical Association* 269(6):766-69, February 10, 1993.

41. Hillborne and others, "The Appropriateness of Use of Percutaneous Transluminal Coronary Angioplasty."

42. Anita L. Stewart and John E. Ware, editors, *Measuring Functioning and Well-Being* (Durham, NC: Duke University Press, 1992).

43. Macro International, Inc., *Survey of Hospital Physician Relationships*, unpublished data, ProPAC contract RFP-01-93,1993.

44. David W. Emmons and Gregory D. Wozniak, "Physician Profiling," in *Socioeconomic Characteristics of Medical Practices 1993: Studies on the Socioeconomic Environment of Medicine*, Martin L. Gonzalez, editor (Chicago: American Medical Association, 1993)10.

45. Ibid., 12.

Chapter 4

State Health Care Spending, Payments, and Reforms

Chapter 4

State Health Care Spending, Payments, and Reforms

The rising costs of health care and the growing number of people lacking health insurance are important national concerns that are even more pronounced for many states. Some states have experienced more rapid escalation of health spending than others, and both the percentage of the population that is uninsured and the financial resources available to address this problem vary by state.

Many factors contribute to geographic variation in health spending; appreciating their influence is integral to understanding the more basic question of why health spending has been rising so much faster than inflation in the general economy. For example, lower per capita costs in some areas may be attributable to inherent differences in the needs of various population groups. Or, on the other hand, they may indicate that certain medical care organizational models, physician practice patterns, or government programs are particularly effective in controlling costs and might be promising for implementation elsewhere.

Variation in per capita spending occurs at the regional and state level, as well as between urban and rural areas and among particular metropolitan areas. State-level variation, however, is particularly important because spending can be affected by state legislative and regulatory actions. Depending on decisions yet to be made in the course of health reform, the influence of state programs and policies may be even greater in the future.

Most national reform proposals specify at least some role for the states, and many permit the states to apply for waivers to operate their own health systems within certain guidelines. Charting an appropriate role for the states requires familiarity with reform activities that are already occurring at the state level. As reforms are implemented, having an accurate picture of current spending patterns also will be important so that both the Federal government and the states can monitor state spending performance over time.

This chapter examines state differences that affect the financing and delivery of health care. The first section presents per capita spending levels by state and discusses the factors associated with geographic variation in this spending. The second section explores how the mix of hospital payments by payer group differs among the states. And finally, the last section examines various state approaches to health care reform, focusing on those states that have undertaken major reform initiatives in recent years.

STATE VARIATION IN HEALTH CARE SPENDING

This section begins by presenting per capita health spending data by state, which were derived by combining estimates of the payments made to providers in each state with population estimates reflecting corrections for the 1990 census undercount.[1] However, these data probably exaggerate the variation in state spending due to the effects of factors that are largely beyond the control of providers, payers, and regulators at the state level. The three most basic of these are patient migration (obtaining care in a state other than the one of residence), differences in age and sex distribution, and variation in the prices providers must pay for inputs—the goods and services that go into patient care.

State-level spending estimates based on provider location must be adjusted for patient migration to produce a per capita measure that can be linked to the state's population. Age and sex are fundamental determinants of the need for care. Therefore, controlling for their effects is necessary to ensure that a per capita measure primarily captures the impact of factors related to behavioral or policy differences

rather than the demographic characteristics of the state. Finally, while input prices are not entirely outside the control of the health care system, there is still general agreement that the effects of price variation should be controlled for in geographic spending comparisons. If these three factors were properly accounted for in developing a set of per capita estimates, then state-level variation would probably be much less than is seen in the numbers available today.

Besides these three, numerous other factors affect state spending levels. Among these are health status; utilization and supply of services; and population characteristics such as health insurance coverage, income and unemployment levels, and urban or rural location. The second part of this section examines the variation in these factors and discusses their importance in determining state per capita spending.

The Health Care Financing Administration (HCFA) is conducting a project to measure per capita health spending by state. When completed, these data will include spending breakdowns by payer and provider type. They will also reflect the effects of patient migration across state lines. The data presented below for all payers are the preliminary results from this project—not yet accounting for patient migration and excluding some of the smaller provider groups. The Prospective Payment Assessment Commission (ProPAC) plans to apply a comprehensive set of adjustments to the Medicare spending estimates from this project to provide further insight into spending variation among states, as well as between the urban and rural areas of each state.[2]

State Per Capita Spending Estimates

The lowest per capita spending for hospital care, physician services, and prescription drugs in 1991 was $1,208 in Idaho (see Table 4-1). At the other end of the scale, per capita spending was almost twice as high in Massachusetts, at $2,391. However, a look at the least and most costly states shows that much of the interstate spending variation is caused by the data being aggregated by location of provider rather than patient residence and by differences in age, sex, and input prices.

In nine of the 10 states with the lowest per capita spending, a significant portion of residents obtained care in another state and input prices in the state (as represented by average hospital wage index values) were below average. This suggests that after accounting for these factors, these states might not actually be among the least costly. On the other hand, in all of them except Utah, a higher-than-average percentage of the population lives in rural areas, which tend to have fewer tertiary care facilities and incur less expense related to teaching than their urban counterparts. These attributes imply that their residents may, in fact, be receiving a less expensive style of care. In three of the states—Oregon, Idaho, and Utah—there is direct evidence that people use less acute medical care. These states had the lowest rates of hospital inpatient days per 1,000 population (other than Alaska) as well as a below-average supply of physicians.

Nine of the 10 highest spending states have values for at least one of the basic cost-influencing factors that would be expected to partially explain their high costs. Four are among the nation's biggest suppliers of care to out-of-state residents, three have unusually large proportions of elderly people, and three have the highest average hospital wage levels. Of these 10 states, however, New York, Massachusetts, and Pennsylvania have among the highest rates of inpatient utilization in the nation together with an above-average physician supply. This suggests they might still be found among the most costly if a per capita measure were available that accounted for migration, age and sex distribution, and input prices.[3]

The range in Medicare spending per enrollee is even wider than that for all payers. For example, the highest state value is about two and a half times the lowest value for Medicare, compared with about twice the lowest value for all payers. Much of this difference appears to be due to measurement inconsistencies between the two population groups rather than to true differences in their geographic spending patterns. Most importantly, the data for all payers cover only hospitals, physicians, and prescription drugs, while the Medicare data encompass all covered services. In addition, there is undoubtedly more patient migration among the elderly, given that many of them live in different states during the summer and winter, and neither data set captures the effects of migration. Finally, spending for services furnished in Department of Defense and Department of Veterans Affairs facilities is included in the

Table 4-1. All-Payer Per Capita and Medicare Per Enrollee Health Spending, by State

State	All-Payer Per Capita Spending for Hospitals, Physicians, and Prescription Drugs[a]	State	Medicare Per Enrollee Spending for All Covered Services[b]
National average	$1,848	National average	$3,685
Idaho	1,208	Wyoming	1,768
Wyoming	1,273	Idaho	2,155
Montana	1,408	South Dakota	2,436
Mississippi	1,410	Utah	2,490
Utah	1,410	Montana	2,498
Vermont	1,437	New Mexico	2,544
Oklahoma	1,525	Vermont	2,572
South Carolina	1,527	Nebraska	2,599
New Mexico	1,534	South Carolina	2,656
Oregon	1,545	Iowa	2,660
Maine	1,580	Maine	2,690
North Carolina	1,601	Delaware	2,887
Arkansas	1,644	Wisconsin	2,889
Iowa	1,650	Alaska	2,890
Washington	1,661	Virginia	2,926
Arizona	1,672	West Virginia	2,932
Kentucky	1,686	New Hampshire	2,952
Virginia	1,688	Hawaii	2,962
Texas	1,695	Oregon	3,056
Kansas	1,714	Indiana	3,103
South Dakota	1,720	Kansas	3,108
New Hampshire	1,720	Oklahoma	3,153
Indiana	1,729	North Carolina	3,180
Nevada	1,730	Minnesota	3,194
Nebraska	1,743	Kentucky	3,220
Wisconsin	1,752	Arkansas	3,236
Alaska	1,766	Colorado	3,239
Colorado	1,770	Mississippi	3,264
Alabama	1,801	Missouri	3,322
West Virginia	1,806	Washington	3,324
Illinois	1,822	Alabama	3,460
Michigan	1,843	North Dakota	3,483
Georgia	1,845	Illinois	3,524
Ohio	1,846	Ohio	3,568
Hawaii	1,855	Rhode Island	3,593
California	1,863	Michigan	3,605
New Jersey	1,877	Texas	3,624
Maryland	1,879	New Jersey	3,705
Rhode Island	1,914	Georgia	3,713
Louisiana	1,919	Nevada	3,759
Minnesota	1,960	Arizona	3,889
Missouri	1,970	Maryland	3,985
Tennessee	1,974	New York	3,991
Delaware	1,992	Tennessee	4,004
Florida	1,998	Connecticut	4,025
Connecticut	2,066	Pennsylvania	4,143
North Dakota	2,068	Louisiana	4,190
Pennsylvania	2,099	Massachusetts	4,211
New York	2,103	Florida	4,233
Massachusetts	2,391	California	4,557

Note: Spending per capita (or per enrollee in the case of Medicare) is calculated as payments to providers located in the state divided by the population of the state; therefore, the effect of patient migration across state borders is not reflected.

[a] Data for 1991, with estimates adjusted for the 1990 census undercount. Covers prescription drug purchases in retail outlets only.

[b] Data for 1992.

SOURCE: Health Care Financing Administration, Office of the Actuary and Bureau of Data Management and Strategy; and Department of Commerce, Bureau of the Census.

all-payer but not the Medicare data. Federal hospitals provide a significant amount of care to the elderly, most of whom are eligible for Medicare benefits, and the amount varies dramatically by state. The number of aged Americans admitted to military hospitals in 1991, for instance, ranged from more than 9,000 in Texas and California to fewer than 25 in Vermont, Montana, and Iowa.[4]

The ranking of most states is similar for Medicare and all-payer spending per capita. For example, six of the eight states with highest and lowest spending are the same for both coverage groups. But there also are several distinct exceptions. Delaware and Minnesota had much lower relative spending for Medicare than for all payers, while relative expenditures in Arizona and Mississippi were considerably lower for all payers.

Annual change in state per capita expenditures is far less affected by the key factors explaining geographic spending variation, because most of these factors remain fairly constant over time. The growth in expenditures does, however, appear to be related to how high spending was at the start of the comparison period. High initial costs provide a strong incentive to contain spending, and unusually low initial costs might indicate that additional spending is needed to ensure adequate access to and quality of care.

From 1980 through 1991, Nevada had the lowest per capita spending growth among the states, 7.4 percent per year, followed closely by California and Alaska (see Table 4-2). Spending levels for all three states were more than 10 percent above average in 1980, and all exhibited low spending growth across all three types of service studied—hospital care, physician services, and prescription drugs. The highest spending growth—11.5 percent or more—was found in West Virginia, New Hampshire, and Tennessee. These states present an inverse profile from the low-end states. Each had per capita expenditures that were at least 15 percent below average in 1980, followed by high spending growth across the hospital, physician, and prescription drug sectors.

Although they use completely different approaches, hospital rate setting and managed care both attempt to control inpatient hospital spending. Two of the states with the most extensive experience in rate setting and managed care, Maryland and Minnesota, respectively, showed similar cost growth results during the 1980s. Both achieved a below-average rise in hospital expenditures (Maryland somewhat more so at 7.3 percent per year), accompanied by an above-average increase in the total of physician and prescription drug spending. The combined result in both cases was a near average performance, implying that some of the potential savings from controlling inpatient expenditures through these mechanisms may be offset by greater service use or higher per unit costs in other sectors.

Factors Explaining Variation in Per Capita Spending

Numerous variables contribute to state-level variation in per capita expenditures. Some are more important than others in terms of the magnitude of their effect, and some are subject to more influence through the actions of providers, payers, and state regulators. This section provides additional information about the most important cost-influencing variables, beginning with the three basic factors addressed earlier—interstate patient migration, age and sex differences, and input price variation.

Patient Migration—For several reasons, many patients obtain care outside the state in which they live. Perhaps the most frequent reason is that a state boundary line cuts through an urban area in such a way that residents routinely cross it for work and recreation as well as for health care. Examples are New York City, which is adjacent to New Jersey and Connecticut, and the Kentucky/Ohio line, which cuts through the Cincinnati metropolitan area. Other reasons people cross state boundary lines include traveling to a major tertiary care facility, getting medical care while on vacation, and obtaining care while living in another state for part of the year without changing legal residence.

Patient migration differs from other cost-influencing variables in that its most important impact is on the measurement of health spending rather than on the actual costliness of care. The potential for distortion can be eliminated by measuring spending for each individual service unit (hospital admissions, physician visits, and so forth) and then aggregating these amounts by the location of patient residence. Patient migration affects actual costliness, however, when people bypass inexpensive local

Table 4-2. Average Annual Change in Per Capita Spending for Hospital Care, Physician Services, and Prescription Drugs, by State, 1980-1991 (In Percent)

State	Hospitals, Physicians, and Prescription Drugs*	Hospital Care	Physician Services	Prescription Drugs*
National average	9.3%	8.7%	10.4%	9.4%
Nevada	7.4	5.9	9.6	7.6
California	7.6	6.7	8.8	7.8
Alaska	7.7	7.7	7.6	8.3
Illinois	8.0	7.3	9.2	10.5
South Carolina	8.2	7.3	9.9	10.3
Texas	8.4	8.1	9.2	10.5
Kansas	8.4	7.5	10.0	9.2
Michigan	8.4	8.0	8.5	10.3
Arizona	8.4	8.1	8.8	9.8
Oklahoma	8.4	8.3	8.8	8.1
Oregon	8.6	8.5	9.0	7.0
Wyoming	8.9	8.4	9.6	10.0
Montana	8.9	9.6	7.3	9.3
Utah	8.9	8.7	9.6	8.2
Maryland	9.0	7.3	11.6	11.0
Washington	9.1	8.1	11.2	10.2
Rhode Island	9.1	8.4	10.6	9.1
Colorado	9.1	8.6	10.3	8.3
Missouri	9.2	8.7	10.6	9.1
Florida	9.2	8.7	10.0	9.2
Ohio	9.2	9.0	9.7	9.1
Iowa	9.3	9.1	9.7	9.4
Nebraska	9.3	9.0	9.7	9.7
Mississippi	9.3	9.4	9.4	9.0
Idaho	9.3	9.8	8.7	8.6
Hawaii	9.6	10.5	8.2	9.1
Maine	9.6	8.6	12.1	10.0
Minnesota	9.6	8.4	11.7	9.1
New York	9.7	8.9	11.6	10.6
Massachusetts	9.8	8.2	13.8	12.0
North Dakota	9.8	9.0	11.2	10.7
Virginia	9.9	9.8	9.8	11.1
Indiana	10.0	9.6	10.8	9.3
Alabama	10.0	9.3	11.7	9.4
Vermont	10.0	10.2	10.1	8.7
Pennsylvania	10.2	9.6	11.7	10.6
New Mexico	10.3	10.1	10.8	10.0
Georgia	10.3	10.0	11.1	9.4
Arkansas	10.4	10.6	11.0	7.8
Louisiana	10.4	10.3	11.0	8.7
North Carolina	10.4	10.4	11.0	8.7
Delaware	10.5	9.3	12.6	10.8
Connecticut	10.5	9.7	12.2	9.9
South Dakota	10.5	10.3	10.8	10.1
Kentucky	10.7	10.8	11.0	9.7
New Jersey	10.7	10.6	11.0	10.8
Wisconsin	11.1	10.8	12.0	8.8
Tennessee	11.5	11.7	11.5	10.0
New Hampshire	11.5	10.5	13.7	10.9
West Virginia	12.3	11.5	13.8	12.7

Note: Calculated as change in payments to providers located in the state divided by the population of the state; therefore, the effect of changing patterns of migration across state borders is not reflected.

* Covers prescription drug purchases in retail outlets only.

SOURCE: Katharine Levit and others, "Health Spending by State: New Estimates for Policy Making," *Health Affairs* 12(3):7-26, Fall 1993; and Department of Commerce, Bureau of the Census.

sources of care to obtain more costly care in another jurisdiction.

National data on patient migration are available only for Medicare hospital services in 1980. Despite being more than a decade old, these data are useful in understanding the size of patient migration effects.

Wyoming residents were by far the most likely to leave the state for medical care, with out-of-state care accounting for nearly a quarter of all hospital services net of a modest amount delivered to patients traveling into the state (see Table 4-3). The residents of Idaho and Vermont were the next most likely to seek care in other states, but each at a net rate less than half that of Wyoming. The state providing the most care to patients from other states was Tennessee, with a net patient inflow of about 10 percent, followed closely by North Dakota and Utah. Interestingly, some of the states with the greatest number and best-known tertiary care facilities, such as Massachusetts, Minnesota, and Texas, were not among the leading providers of care to nonresidents. This implies that border crossing by those living close to a state's boundaries often has a much greater effect than long-distance travel for tertiary care.

Age and Sex—The age and sex distributions of a state's population influence its per capita spending level. These characteristics affect the demand for health services and the type of services used. In general, older people use more health care, and at a higher cost per service, than the rest of the population. The 1987 National Medical Expenditure Survey showed that hospital stays for older patients are almost twice as expensive as those for younger ones.[5] A major reason is that services for older people usually include treatment of chronic conditions, which are costly. Elderly persons also use more nursing facility services and more expensive prescription drugs. While infants and young children are not as costly as the elderly, they contribute disproportionately to the per capita costs of the nonelderly population.[6]

The percentage of persons 65 and older varies considerably by state (see Table 4-4). Not surprisingly, Florida had the largest concentration of elderly residents in 1993, nearly 20 percent. Alaska had the lowest share of elderly residents, just over 4

Table 4-3. States with Highest and Lowest Patient Migration for Medicare Hospital Services, 1980 (In Percent)

	Net Inflow of Patients*		Share of Spending in State by Nonresidents		Share of Resident Spending for Out-of-State Care	
Rank	State	Percent	State	Percent	State	Percent
Highest						
1	Tennessee	10.4%	North Dakota	18.0%	Wyoming	25.5%
2	North Dakota	8.5	New Hampshire	14.2	Vermont	21.9
3	Utah	6.3	Tennessee	13.8	New Hampshire	18.7
4	Nevada	4.4	Nevada	13.5	Idaho	16.7
5	Missouri	4.4	Vermont	13.0	New Mexico	15.0
6	Colorado	4.4	West Virginia	11.3	Alaska	14.7
7	Minnesota	4.3	Utah	10.9	West Virginia	14.0
Lowest						
1	Wyoming	-24.7	Michigan	2.5	California	1.6
2	Idaho	-12.2	California	2.8	Texas	2.4
3	Vermont	-11.3	Illinois	3.4	Massachusetts	2.6
4	New Mexico	-8.8	Oklahoma	3.7	Hawaii	2.8
5	Alaska	-8.1	New York	4.1	Pennsylvania	3.6
6	Mississippi	-7.8	South Carolina	4.2	Tennessee	3.8
7	Kansas	-7.5	New Jersey	4.3	Louisiana	4.1

Note: Based on charges for inpatient and outpatient services to Medicare patients. Excludes the District of Columbia.

* Reflects the net effects of state residents obtaining care out of state and people coming into the state for care.

SOURCE: Katharine Levit, "Personal Health Care Expenditures, by State: 1966-1982," *Health Care Financing Review* 6(4): 1-49, Summer 1985.

Table 4-4. States with Highest and Lowest Percentage of Residents in Selected Age and Sex Categories, 1993

	Age						Female	
	65 and Over		85 and Over		Under 6			
Rank	State	Percent	State	Percent	State	Percent	State	Percent
National average	All	12.7%	All	1.3%	All	9.4%	All	51.1%
Highest								
1	Florida	18.6	Iowa	2.1	Alaska	34.3	Mississippi	52.1
2	Pennsylvania	15.8	North Dakota	2.0	Utah	11.6	Alabama	52.0
3	Iowa	15.5	South Dakota	1.9	California	10.7	Pennsylvania	52.0
4	Rhode Island	15.5	Nebraska	1.9	Texas	10.1	New York	51.9
5	West Virginia	15.3	Kansas	1.8	New Mexico	10.1	Rhode Island	51.9
6	Arkansas	15.0	Florida	1.8	Arizona	9.8	Massachusetts	51.9
7	North Dakota	14.8	Missouri	1.7	Louisiana	9.5	Louisiana	51.9
							West Virginia	51.9
Lowest								
1	Alaska	4.4	Alaska	0.3	West Virginia	7.1	Alaska	47.2
2	Utah	8.9	Arizona	0.3	Maine	7.9	Nevada	49.1
3	Colorado	10.0	Nevada	0.7	Pennsylvania	8.1	Hawaii	49.3
4	Georgia	10.1	Georgia	0.9	Iowa	8.2	Wyoming	49.8
5	Texas	10.2	Utah	0.9	Vermont	8.2	California	50.0
6	California	10.6	Hawaii	1.0	Kentucky	8.2	Idaho	50.1
7	Wyoming	10.9	South Carolina	1.0	Florida	8.3	North Dakota	50.2

Note: Excludes the District of Columbia.

SOURCE: Department of Commerce, Bureau of the Census, Census Advisory CB 94-43, Washington, DC, March 1994.

percent, as well as a disproportionate number of children under six, about 34 percent. The states with the highest percentages of the "oldest old," people who are 85 and older, generally were concentrated in the Midwest.

The relative proportions of males and females also contribute to spending variations across states; these proportions vary slightly by state. On average, women are more likely than men to use health care services.[7] For example, women in their childbearing years, between 20 and 44, are more than twice as likely to be hospitalized as men in the same age group.[8]

Input Prices—The prices providers pay for the goods and services needed to deliver patient care differ by state, and the variation is even greater between urban and rural areas within states and among specific market areas. Input price variation tends to be closely linked to geographic differences in the cost of living.

The prices of all items hospitals purchase vary geographically, but the differences are especially pronounced for employee wages and benefits, which make up nearly half of all hospital expenses. Because of widespread participation in regional and national group purchasing programs, there is thought to be much less variation in the prices of most products hospitals buy. But there is evidence of price differences for services, such as energy, malpractice insurance, and telephones.[9]

The only state-level data available on relative input prices are those used to compute the Medicare hospital wage index, which is used in determining Medicare payments. The Medicare wage index has been criticized for failing to differentiate between the effects of wage level variation and occupational mix differences among hospitals. Occupational mix tends to result in overstating wages in large urban hospitals offering a complex array of services. However, ProPAC has developed a method of adjusting wages for occupational mix, and these data were used to construct a more accurate set of Medicare wage index values solely for research purposes.

In 1990, California had the highest average hospital wage index in the country, 1.26, which implies

that, all else being equal, its total labor costs would have been 26 percent above the national average (see Table 4-5). Connecticut, Alaska, and New York followed closely. Other than Alaska and Hawaii, the 10 states with the highest wages are all on or near the East or West Coasts. There were 12 states with an average index of .85 or below, which means that their wage levels were at least 30 percent below the top of the range. Most of these states are located in the southern or mountain regions.

Wage levels and other input prices are generally considered beyond provider control. However, there are at least limited opportunities for management influence, such as using relatively more nursing assistants in areas where shortages have driven up salaries for registered nurses and making more equipment-for-labor substitutions in generally high wage areas.

Health Status—While age and sex provide some insight into state spending variations attributable to medical need, a more precise measure is the health status of a state's population. Sickly residents require more health care services than healthy ones, regardless of their age or sex. Health status cannot be viewed alone, however. The relative impact of health status on spending is also related to other factors, such as availability of health care services and provider practice patterns.

Health status is a concept that reflects a number of factors, many of which cannot be measured. State variation in those indicators of health status that can be measured, however, provides some insight into relative healthiness. Morbidity and mortality rates associated with specific medical conditions vary substantially across states (see Table 4-6). The combined incidence of three major infectious diseases, acquired immune deficiency syndrome (AIDS), tuberculosis, and hepatitis, varies tenfold. West Virginia ranks highest in two of the measures, estimated new cancer cases and deaths from heart diseases. Alaska has the lowest mortality rate from heart disease, but the highest from accidents. Hawaii ranks low in three of the four categories presented—new cancer cases, heart diseases, and accidents—while Florida, which has a large elderly population, ranks near the top in all the disease-related categories.

Table 4-5. Average Hospital Wage Index Values, by State, 1990

State	Average Hospital Wage Index
Mississippi	0.71
South Dakota	0.78
Arkansas	0.80
Wyoming	0.80
Alabama	0.81
Oklahoma	0.84
West Virginia	0.84
Vermont	0.84
Iowa	0.84
Kansas	0.85
North Dakota	0.85
Montana	0.85
Kentucky	0.86
South Carolina	0.87
Idaho	0.87
Virginia	0.88
Maine	0.88
Tennessee	0.89
Wisconsin	0.89
Louisiana	0.89
Nebraska	0.90
New Mexico	0.90
Missouri	0.90
Georgia	0.90
Indiana	0.91
North Carolina	0.91
Texas	0.94
Ohio	0.94
Utah	0.95
Illinois	0.97
Maryland	0.97
Florida	0.98
Colorado	0.98
Arizona	0.99
Oregon	0.99
Pennsylvania	0.99
Minnesota	1.00
Delaware	1.02
New Hampshire	1.02
Michigan	1.03
Washington	1.04
Rhode Island	1.06
Hawaii	1.10
Massachusetts	1.11
New Jersey	1.11
Nevada	1.11
New York	1.18
Alaska	1.20
Connecticut	1.20
California	1.26

Note: Averages calculated by ascribing an area wage index value to each employee work hour, aggregating to the state level, and dividing by total hours worked. Excludes the District of Columbia.

SOURCE: ProPAC analysis of Medicare Cost Report data and wage index values from the Health Care Financing Administration.

Table 4-6. States with Highest and Lowest Morbidity and Mortality Rates Per 100,000 Population for Selected Health Status Indicators

	Morbidity Rates				Mortality Rates			
	Major Infectious Diseases[a]		New Cancer Cases		Diseases of of the Heart		Accidents[b]	
Rank	State	Number of Incidents	State	Number of Incidents	State	Number of Deaths	State	Number of Deaths
National average	All	43.7	All	453.7	All	286.9	All	35.4
Highest								
1	New York	83.7	West Virginia	571.4	West Virginia	392.8	Alaska[c]	63.2
2	California	70.5	Florida	570.2	Mississippi	371.6	Mississippi	56.8
3	Delaware	66.6	Pennsylvania	556.1	Pennsylvania	363.3	New Mexico	56.3
4	Florida	61.7	Rhode Island	550.0	New York	353.1	Alabama	53.9
5	Arizona	58.1	Arkansas	544.5	Florida	348.2	Arkansas	51.8
6	Missouri	57.6	Maine	540.6	Arkansas	346.0	West Virginia	49.1
7	Hawaii	51.9	Nebraska	540.0	Missouri	344.8	Montana	48.6
Lowest								
1	Iowa	8.7	Alaska	200.3	Alaska	82.5	Massachusetts	23.4
2	New Hampshire	9.1	Utah	242.0	Utah	157.2	Connecticut	24.8
3	Maine	10.0	Colorado	316.9	Hawaii	180.4	Hawaii	25.0
4	Wyoming	10.5	New Hampshire	323.5	Colorado	181.7	New Hampshire	26.4
5	Vermont	11.2	Hawaii	332.9	Wyoming	197.8	New Jersey	26.4
6	West Virginia	11.6	New Mexico	346.4	New Mexico	199.9	Maryland	27.1
7	Ohio	16.1	Texas	349.4	California	222.0	Rhode Island	28.2

Note: All data are for 1991 except new cancer cases, which are estimated for 1993. Excludes the District of Columbia.

[a] Includes AIDS, tuberculosis, and hepatitis types A and B.

[b] Includes unintentional acts that are not diseases; does not include suicides or homicides.

[c] Data from Alaska may be inaccurate due to reporting inconsistencies.

SOURCE: Centers for Disease Control and Prevention, "Summary of Notifiable Diseases, United States, 1992," *Morbidity and Mortality Weekly Report,1992* 44(51):4-9, September 24, 1993. Susan Oehme Raetzman, Dorothy A. Jensen, and Anne P. Wright, *Reforming the Health Care System: State Profiles 1993* (Washington, DC: American Association of Retired Persons, 1993). Department of Health and Human Services, National Center for Health Statistics, "Advanced Report of Final Mortality Statistics, 1991," *Monthly Vital Statistics Report* 42(25):44-45, August 31, 1993.

Utilization—This factor refers to the volume and mix of health services used per person. Utilization is clearly a major determinant of per capita costs, although it is partially within and partially beyond health system control. A minimum level of service use is critical to acceptable health care outcomes, given a population group's average health status. But the costs emanating from service usage can sometimes be minimized by substituting less expensive forms of care (such as preventive care to minimize acute care services, or home health care in place of the last days of a hospital inpatient stay) and by eliminating unnecessary care.

All-payer data on service use are limited for physicians and other ambulatory care providers and for the various forms of long-term care. Only for hospital inpatient care has data been developed to consistently measure utilization by state, and even then the most frequently used data sources are not adjusted for patient migration.

The rate of inpatient hospital utilization, measured by the number of inpatient days per 1,000 population, is driven by the admission rate and average length of stay. Three states had admission rates below 85 per 1,000 people in 1992—Alaska, Hawaii, and New Hampshire (see Table 4-7). Even after considering the extensive amount of care its residents obtain out of state, Alaska's rate was by far the lowest. Given the state's sparse and isolated population, this figure raises the question whether inpatient hospital care is always available in Alaska when needed. Proximity to hospital care may also be a potential problem for residents of Hawaii's outer islands, but these areas account for only a

Table 4-7. States with Highest and Lowest Inpatient Use of Community Hospitals, 1992

	Inpatient Days Per 1,000 Population		Admissions Per 1,000 Population		Average Length of Stay (In Days)	
Rank	State	Number	State	Number	State	Number
National average	All	778	All	121	All	6.4
Highest						
1	New York	1,177	Tennessee	152	New York	9.0
2	New Jersey	1,088	West Virginia	152	New Jersey	7.6
3	Pennsylvania	1,079	Pennsylvania	150	Hawaii	7.3
4	North Dakota	978	Alabama	145	Pennsylvania	7.2
5	Massachusetts	945	North Dakota	145	Connecticut	7.1
6	Tennessee	944	New Jersey	143	Massachusetts	6.8
7	West Virginia	932	Arkansas	143	North Dakota	6.7
Lowest						
1	Alaska	334	Alaska	64	Oregon	4.5
2	Idaho	425	New Hampshire	72	Idaho	4.6
3	Oregon	449	Hawaii	83	Utah	4.9
4	Utah	459	Idaho	93	Arizona	4.9
5	New Hampshire	469	Utah	95	Wyoming	5.0
6	Washington	487	Washington	97	Washington	5.0
7	Wyoming	490	Wyoming	98	New Mexico	5.2

Note: Includes only nonfederal short-term general and other specialty hospitals. Excludes data on nursing home type units that may be part of these hospitals. Excludes the District of Columbia.

SOURCE: American Hospital Association, *Hospital Statistics*, 1993-94; and Department of Commerce, Bureau of the Census, Census Advisory CB 94-43, Washington, DC, March 1994.

small portion of the state's population. Rather, Hawaii's low hospital use rate is likely a positive outgrowth of the emphasis the state's medical care and insurance systems place on ambulatory and preventive care. Hawaii and the state with the next lowest admission rate, New Hampshire, also appear to benefit from populations with above-average health status (see Table 4-6).

West Virginia, Pennsylvania, and Tennessee had the highest admission rates, although Tennessee probably would have been closer to the average if patient migration were taken into account. West Virginia's hospital use rate may have been pushed up by its high uninsured and poverty populations, because these overlapping groups tend to have inadequate access to appropriate primary and preventive care. Similarly, Pennsylvania's rate is probably affected by its having a larger share of elderly people than any other state except Florida.

New York's average length of stay, 9.0 days, is by far the longest, which probably reflects physician practice patterns as well as a below-average supply of long-term care resources. The next longest stays were in New Jersey and Hawaii, although Hawaii's average may have resulted partly from treating sicker patients, given its unusually low admission rate. Oregon had the shortest length of stay at 4.5 days, followed closely by Idaho, Utah, Arizona, Wyoming, and Washington. This reflects a long-standing pattern of physician practice found in varying degrees among most western states.

Although data are not available to measure trade-offs among all applicable health services, the share of spending devoted to hospital care, physician services, and prescription drugs sheds some light on this important factor. The proportion of spending devoted to the expensive hospital sector varies considerably, though it is important to remember that this category includes outpatient care, which can be an alternative to inpatient admission. In 1991, the highest percentage of all-payer spending for hospital care, 66 percent, was found in Pennsylvania, Wyoming, New York, and Montana (see Table 4-8).

Table 4-8. Share of All-Payer Spending for Hospital Care, Physician Services, and Prescription Drugs, by State, 1991

State	Hospital Care	Physician Services	Prescription Drugs*
National average	60%	32%	8%
Nevada	53	42	6
Minnesota	53	41	6
California	54	40	7
Washington	54	39	7
Oregon	56	38	7
Maryland	56	35	9
Florida	56	37	7
Arizona	56	36	8
Wisconsin	57	35	8
Delaware	58	35	7
New Hampshire	59	33	8
Kansas	59	33	8
Virginia	59	32	9
Colorado	59	35	6
Idaho	59	31	10
Arkansas	60	31	9
Utah	60	32	8
Connecticut	60	33	8
Texas	60	32	8
Hawaii	60	34	6
North Dakota	60	33	6
New Jersey	60	31	9
Alabama	60	31	9
West Virginia	61	27	10
Vermont	61	30	10
Georgia	61	31	8
Oklahoma	61	30	9
Michigan	61	30	9
Kentucky	61	29	10
Indiana	62	30	9
North Carolina	62	29	9
Ohio	62	30	8
Tennessee	63	29	9
Rhode Island	63	28	9
Massachusetts	63	30	7
Louisiana	63	29	8
Iowa	63	28	9
Maine	64	28	8
Nebraska	64	28	8
New Mexico	64	29	7
Alaska	64	30	6
Illinois	65	27	8
Mississippi	65	25	10
Missouri	65	28	7
South Carolina	65	26	9
South Dakota	65	28	7
Montana	66	27	8
New York	66	28	7
Wyoming	66	26	8
Pennsylvania	66	27	8

Note: Spending is based on payments to providers located in the state, such that the effect of patient migration across state borders is not reflected.

* Covers prescription drug purchases in retail outlets only.

SOURCE: Health Care Financing Administration, Office of the Actuary; and Department of Commerce, Bureau of the Census.

The smallest shares were in the western states of Nevada, California, Washington, Oregon, and Arizona, and in Minnesota, Maryland, and Florida. These include five of the six states with the highest percentage of residents enrolled in a health maintenance organization (HMO).[10]

Supply—The supply of health resources is another key determinant of per capita spending. Most available measures of supply for facility-based services are related to physical structure, but supply also encompasses other inputs such as equipment and labor. Supply and utilization combine to determine the aggregate productivity of the health system. The productivity of a state's health providers can be viewed conceptually as the product of the number and mix of services used per person and the number and mix of inputs needed to deliver those services.

Nebraska and North Dakota had the highest number of hospital beds per 1,000 population in 1992—5.1 and 5.0, respectively (see Table 4-9). These and three of the next four ranking states—South Dakota, Arkansas, and Mississippi—are all predominantly rural and, as is typical of sparsely populated areas, had low average occupancy rates. The states with the lowest bed supply were all among the states cited earlier as having the lowest utilization rates. With some 2.0 beds per 1,000—less than half the supply of the states at the top of the scale—these states have been able to magnify their savings from low use of services by restraining construction expenditures. There was also a wide range of average occupancy rates, from 38 percent in Wyoming to 83 percent in New York.

Nebraska had the largest nursing home bed supply in 1993, with 86 beds per 1,000 elderly people, followed closely by Kansas (see Table 4-10). Nebraska also had a large number of hospital beds, while the third ranking state, Minnesota, may have balanced low hospital utilization and supply with greater use of long-term care. The lowest number of nursing home beds relative to the size of their elderly populations were found in Nevada, Hawaii, Arizona, and Florida. Interestingly, these states include some popular retirement areas. It may be that above-average health status and financial means enable many of the elderly in these areas to avoid nursing facility utilization. The range of nursing

Table 4-9. States with Highest and Lowest Supply of Community Hospital Inpatient Services, 1992

	Beds Per 1,000 Population		Average Occupancy	
Rank	State	Number	State	Percent
National average	All	3.3	All	63.9%
Highest				
1	Nebraska	5.1	New York	83.3
2	North Dakota	5.0	Hawaii	79.7
3	South Dakota	4.4	New Jersey	78.9
4	Tennessee	4.3	Rhode Island	77.1
5	Arkansas	4.3	Connecticut	75.6
6	Mississippi	4.3	Maryland	75.2
7	Iowa	4.2	Massachusetts	72.4
Lowest				
1	Alaska	1.8	Wyoming	38.4
2	New Hampshire	2.0	Idaho	47.6
3	Hawaii	2.1	Nebraska	47.7
4	Washington	2.2	Alaska	49.8
5	Arizona	2.3	Kansas	50.0
6	Utah	2.3	South Dakota	50.0
7	Oregon	2.4	Montana	50.9

Note: Includes only nonfederal short-term general and other specialty hospitals. Excludes data on nursing home type units that may be part of these hospitals. Excludes the District of Columbia.

SOURCE: American Hospital Association, *Hospital Statistics*, 1993-94; and Department of Commerce, Bureau of the Census, *Census Advisory*, CB 94-43, Washington, DC, March 1994.

home occupancy rates is relatively small, with all states averaging more than 80 percent.

Alaska, Idaho, Mississippi, and Wyoming had the fewest physicians per 100,000 people (see Table 4-11). By traveling elsewhere for care, Wyoming's residents seem to have compensated for the paucity of doctors in the state; the other three may have real physician access problems. This notion is supported by the fact that they are among the six states that would need to add the most physicians per 100,000 population to eliminate all federally designated Health Profession Shortage Areas.[11] This latter measure indicates that physician shortages in 1988 were most pervasive in New Mexico and West Virginia.

Massachusetts, Maryland, New York, Connecticut, and Rhode Island had the most physicians per 100,000 population. These East Coast states are all well above average in HMO penetration, which could generate higher demand for physician ambulatory care and reduce hospital inpatient utilization. Despite this, two of them—New York and Massachusetts—rank among the states with both the most physicians and the highest rates of inpatient hospital utilization.

Other Population Characteristics—The population-related factors discussed earlier—age, sex, and health status—are predisposing determinants of an individual's need for health care services. Other population characteristics, such as health insurance coverage, income, and employment status, are more closely associated with access to health services. While these characteristics also affect spending, they do so by influencing a patient's decision to seek treatment or a provider's willingness to provide care, independent of the medical need for that care. For example, people with health insurance incur more health care expenditures, on average, than those without insurance. Similarly, people with higher incomes are likelier to have access to more health care services than their lower-income counterparts.[12] All these characteristics have an impact on a state's spending pattern, and they should not be viewed in isolation.

Table 4-10. States with Highest and Lowest Supply of Nursing Home Services

	Beds Per 1,000 Population Over Age 65[a]		Median Occupancy Rate[b]	
Rank	State	Number	State	Rate
National average	All	53.1	All	94.3%
Highest				
1	Nebraska	85.9	North Dakota	98.3
2	Kansas	85.3	South Carolina	98.3
3	Minnesota	80.3	Kentucky	98.2
4	Illinois	79.4	New York	98.2
5	Oklahoma	79.4	Minnesota	98.2
6	South Dakota	78.9	Tennessee	97.9
7	Louisiana	78.2	Georgia	97.9
Lowest				
1	Nevada	25.4	Texas	83.4
2	Hawaii	26.4	Alaska	84.0
3	Arizona	27.9	Utah	85.4
4	Florida	28.2	Oklahoma	86.1
5	Oregon	36.5	Colorado	86.2
6	West Virginia	36.3	Indiana	86.5
7	California	36.6	Arizona	88.7

Note: Excludes the District of Columbia.

[a] Data for 1993.

[b] Data for 1991.

SOURCE: Health Care Investment Analysts, Inc., and Arthur Andersen & Co., *The Guide to the Nursing Home Industry*, 1993.

Health Insurance Coverage—The extent to which state populations are covered by health insurance varies widely (see Table 4-12). In 1992, almost 23 percent of Nevada's residents were uninsured, compared with only 6 percent of Hawaii's. That Hawaii has the lowest uninsured rate is not surprising because in 1974 it reformed its health care system and required all employers to provide coverage to their workers.

Nationally, about 71 percent of the population was covered by some form of private insurance at any one time in 1992, although this ranged from a high of nearly 82 percent in Connecticut to a low of about 60 percent in Louisiana. As expected, states with large elderly populations, like Florida and West Virginia, had the highest proportion of residents with Medicare coverage.

Income-Related Characteristics—States such as Mississippi, Louisiana, and West Virginia, which had the greatest percentages of people below the Federal poverty level, also had high shares of Medicaid recipients (see Table 4-13). Additionally, these states tended to have lower per capita total incomes.

Comparing states on the basis of income characteristics may be misleading, however, because these measures do not account for cost-of-living differences. Because they are unrelated to cost of living, unemployment rates provide insight into the relative economic condition of a state that might not be evident from looking solely at income levels. Massachusetts is illustrative. In 1992, a relatively low proportion of its population was below the Federal poverty level and its average per capita income was one of the highest in the nation, yet it had one of the highest unemployment rates.

Rural Areas—The proportion of a state's population located in an urban or rural area can affect its per capita spending level. Health care spending per person is lower in rural areas than in urban ones, largely because of lower prices and the use of less-intensive services. For example, while hospital admission rates generally are higher in rural areas,

Table 4-11. States with Highest and Lowest Supply of Physicians, 1992

	Physicians Per 100,000 Population[a]		Office-Based Primary Care Physicians Per 100,000 Population[b]	
Rank	State	Number	State	Number
National average	All	223	All	54
Highest				
1	Massachusetts	353	Vermont	74
2	Maryland	340	Hawaii	68
3	New York	332	Maryland	68
4	Connecticut	317	Minnesota	67
5	Rhode Island	268	Massachusetts	65
6	Vermont	263	Connecticut	65
7	New Jersey	259	Missouri	64
Lowest				
1	Alaska	127	Nevada	38
2	Idaho	128	Mississippi	42
3	Mississippi	135	Michigan	42
4	Wyoming	139	Oklahoma	42
5	Nevada	144	Utah	43
6	South Dakota	150	Iowa	44
7	Oklahoma	152	Idaho	44

Note: Excludes the District of Columbia.

[a] Excludes Federal and inactive physicians.

[b] Includes internal medicine, general, and family practitioners.

SOURCE: 1992 Area Resource File, from the Health Resources and Services Administration, Bureau of Health Professions; and Department of Commerce, Bureau of the Census, *Census Advisory*, CB 94-43, Washington, DC, March 1994.

rural residents historically have been less likely to receive costly, technology-intensive types of treatment.[13]

States' shares of residents living in rural areas varied widely in 1990, from 68 percent in Vermont to 7 percent in California (see Table 4-14). In about two-thirds of the states, more than 20 percent of the residents lived in rural areas.

STATE VARIATION IN HOSPITAL PAYMENTS

The payments hospitals receive from different payers vary significantly relative to the costs of treating each payer's patient load. For years, the general pattern nationally has been that the losses generated by Medicare, Medicaid, and uncompensated care (net of state and local government subsidies) are covered primarily by private insurers through a process that has come to be known as cost shifting.[14] Cost shifting also occurs among payers in other health sectors, including nursing facilities, home health agencies, and physicians, but data are available only to measure the phenomenon for hospitals.

The profile of cost shifting among payers varies dramatically across the states. There are different degrees of reliance on private sector gains and different mixes of losses related to Medicare, Medicaid, and uncompensated care. These variations can be observed by comparing payments from each payer by state and by examining each state's mix of gains and losses.

Maryland had the highest Medicare payment to cost ratio in 1992, 109 percent, due to the design of its all-payer rate setting system (see Table 4-15). In this state, each payer's payment includes a uniform add-on for uncompensated care, in addition to an amount designed to cover all applicable patient care costs.

Among the other 40 states for which adequate data were available in 1992, all of whose hospitals

Table 4-12. States with Highest and Lowest Percentage of Residents with Health Insurance Coverage, 1992

	Population Uninsured		Type of Insurance					
			Private		Medicare		Medicaid	
Rank	State	Percent	State	Percent	State	Percent	State	Percent
National average	All	14.7%	All	71.1%	All	13.2%	All	11.2%
Highest								
1	Nevada	22.6	Connecticut	81.8	Florida	18.3	Mississippi	16.6
2	Texas	22.4	Wisconsin	81.6	West Virginia	17.2	Tennessee	15.4
3	Louisiana	22.1	Iowa	80.7	Pennsylvania	16.6	New Mexico	15.4
4	Oklahoma	22.6	Utah	80.6	Arkansas	15.6	South Carolina	15.1
5	Arkansas	19.8	Kansas	80.5	Arizona	15.6	Louisiana	14.8
6	Florida	19.5	North Dakota	80.0	Rhode Island	15.4	West Virginia	14.7
7	California	19.3	Nebraska	79.8	South Dakota	14.9	California	14.2
Lowest								
1	Hawaii	6.0	Louisiana	59.9	Alaska	5.2	Nevada	5.2
2	Minnesota	8.1	Mississippi	61.2	Utah	8.8	Virginia	6.7
3	Connecticut	8.2	New Mexico	61.9	Virginia	10.1	Utah	7.0
4	North Dakota	8.3	Texas	62.7	New Hampshire	11.0	Kansas	7.2
5	Pennsylvania	8.6	California	63.9	Maryland	11.2	New Hampshire	7.4
6	Wisconsin	9.0	Oklahoma	64.0	Texas	11.2	New Jersey	7.5
7	Montana	9.3	Arkansas	64.0	California	11.3	Idaho	7.6
	Nebraska	9.3						
	Rhode Island	9.3						

Note: Includes both elderly and nonelderly residents. Categories are not mutually exclusive. Excludes the District of Columbia.

SOURCE: March 1993 Current Population Survey, Department of Commerce, Bureau of the Census (unpublished).

are paid under the prospective payment system (PPS), the average Medicare payment to cost ratio ranged from 98 percent in Rhode Island to 76 percent in Maine.[15] This variation is largely attributable to state-level differences in the costliness of inpatient care and the degree to which hospitals in each state receive above-cost payments through the indirect medical education (IME) and disproportionate share (DSH) adjustments to the PPS rates.

Medicaid payments vary even more than Medicare's because each state sets its own payment rates. Moreover, this variation increased dramatically in 1992, as some states took the opportunity to maximize the Federal contribution toward their Medicaid funding through provider taxes. These taxes were paid by all hospitals in the state (usually as a certain percentage of their Medicaid or all-payer revenue), and sometimes by physicians and nursing facilities as well. The tax proceeds, along with the accompanying Federal matching money, were then distributed by a formula designed either to provide extra revenue to hospitals with substantial numbers of uncompensated care or low-income patients, or to reduce government operating subsidies.

Eleven of 41 states had Medicaid payments that exceeded associated costs in 1992, compared with only four of 47 states in 1991. With payments covering 127 percent of costs, West Virginia ranked highest and exceeded New Jersey's 119 percent top mark the previous year.[16] At the low end of the scale, Vermont paid only 63 percent of Medicaid costs, but this was still higher than the 56 percent covered by Illinois and the 60 percent by Nevada in 1991.

The payment to cost ratio for private payers is the best overall indicator of the level of cost shifting because it measures the above-cost subsidy being paid proportionately by private payers in each state. The least amount of cost shifting was found in New York, where the private sector

Table 4-13. States with Highest and Lowest Values for Selected Income-Related Characteristics, 1992

	Population Below Federal Poverty Level		Per Capita Income*		Population Unemployed	
Rank	State	Percent	State	Amount	State	Percent
National average	All	14.0%	All	$19,394	All	6.8%
Highest						
1	Mississippi	24.5	Connecticut	27,137	West Virginia	11.3
2	Louisiana	24.2	New Jersey	26,969	Alaska	9.1
3	West Virginia	22.3	New York	23,842	California	9.1
4	New Mexico	21.0	Massachusetts	23,811	Rhode Island	8.9
5	Kentucky	19.7	Maryland	23,249	Michigan	8.8
6	South Carolina	18.9	New Hampshire	22,596	Massachusetts	8.5
7	Oklahoma	18.4	Alaska	22,201	New York	8.5
Lowest						
1	Delaware	7.6	Mississippi	14,128	Nebraska	3.0
2	New Hampshire	8.8	West Virginia	15,332	South Dakota	3.1
3	Utah	9.3	New Mexico	15,563	Kansas	4.2
4	Virginia	9.4	Utah	15,624	Hawaii	4.5
5	Connecticut	9.4	Arkansas	15,765	Iowa	4.6
6	Alaska	10.0	Louisiana	15,874	North Dakota	4.9
7	Massachusetts	10.0	South Carolina	16,197	Utah	4.9
	New Jersey	10.0				

Note: Excludes the District of Columbia.

* Includes value of non-cash benefits, such as health insurance.

SOURCE: Department of Commerce, Bureau of the Census, *Poverty in the United States: 1992* (Washington, DC: Department of Commerce, 1993) 60-185; and Department of Labor, Bureau of Economic Analysis and Bureau of Labor Statistics, local area unemployment statistics, April 1994.

payment to cost ratio was 106 percent, primarily because of the state's rate setting system (see Table 4-16). Rhode Island, with a ratio of 109 percent, was next, followed by Wyoming and Maryland with 111 percent and 113 percent, respectively. The circumstances producing a low level of cost shifting differ considerably among these states.

In New York, Medicare losses were low not because its hospitals had low costs, but because the state has a large concentration of urban teaching hospitals that benefit from the Medicare IME and DSH payment adjustments. Uncompensated care losses were below average, but only because a substantial amount of local tax money is appropriated to public hospitals to offset a large charity care burden. While New York's total losses on Medicare, Medicaid, and uncompensated care were only the third lowest among the states, its rate setting system limits the extent to which hospitals can shift costs. Consequently, New York was the only state

Table 4-14. States with Highest and Lowest Percentage of Residents in Rural Areas, 1990

Rank	State	Percent
National average	All	24.8%
Highest		
1	Vermont	67.8
2	West Virginia	63.9
3	Maine	55.4
4	Mississippi	52.9
5	South Dakota	50.0
6	North Carolina	49.6
7	New Hampshire	49.0
Lowest		
1	California	7.4
2	New Jersey	10.6
3	Hawaii	11.0
4	Nevada	11.7
5	Arizona	12.5
6	Utah	13.0
7	Rhode Island	14.0

Note: Excludes the District of Columbia.

SOURCE: Department of Commerce, Bureau of the Census.

Table 4-15. Medicare and Medicaid Hospital Payments as a Percentage of Costs, by State, 1992

State	Medicare	State	Medicaid
National average	89%	National average	91%
Maryland	109	West Virginia	127
Rhode Island	98	New Hampshire	123
Oregon	97	South Carolina	119
Vermont	96	New Jersey	116
New York	95	Mississippi	115
New Jersey	95	Indiana	114
New Mexico	95	Texas	110
Massachusetts	94	Virginia	109
Washington	93	Maine	105
Oklahoma	93	Maryland	104
Virginia	92	Tennessee	102
Mississippi	91	New York	99
Wisconsin	91	Delaware	97
Wyoming	91	Kentucky	96
Michigan	90	Ohio	96
Kentucky	90	Michigan	93
Pennsylvania	89	California	93
North Carolina	89	Massachusetts	92
California	88	North Carolina	91
Ohio	88	Iowa	91
West Virginia	88	Alaska	91
Utah	88	Rhode Island	90
Alaska	88	Washington	89
Florida	88	South Dakota	88
Missouri	88	Pennsylvania	87
Montana	87	Georgia	86
Indiana	86	Montana	86
South Dakota	86	Wyoming	86
Georgia	85	Nevada	85
Iowa	85	Utah	83
New Hampshire	85	Wisconsin	81
Tennessee	84	Oregon	81
Illinois	84	New Mexico	80
Texas	84	Colorado	78
Nevada	83	Oklahoma	78
Colorado	83	Missouri	76
Nebraska	81	Nebraska	74
South Carolina	81	Illinois	74
Delaware	80	Florida	69
Connecticut	79	Connecticut	68
Maine	76	Vermont	63

Note: Ratios calculated as the payment received from each payer divided by the cost of treating its patients, including both inpatient and outpatient services. Due to reporting inconsistencies related to Medicaid disproportionate share payments and provider-specific taxes, the sample of hospitals was insufficient for Alabama, Arizona, Arkansas, District of Columbia, Hawaii, Idaho, Kansas, Louisiana, Minnesota, and North Dakota. There are significant margins of error for the numbers related to all payers in 1992.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

in 1992 where hospitals operated at an aggregate loss on patient care services.

Rhode Island also had small Medicare losses, in this case primarily because its hospitals' costs are relatively low.[17] And while no local tax appropriations were available to help offset uncompensated care costs, the state's hospitals carried a small uncompensated care burden to begin with. Wyoming's losses were similar to those in Rhode Island, except for somewhat larger Medicaid losses linked to the fact that it was not among the states

Table 4-16. Hospital Private Payer Payments and Gains and Losses, by State, 1992 (In Percent)

State	Private Payer		Losses as a Percentage of Total Costs		
	Payments as a Percentage of Private Payer Costs	Gains as a Percentage of Total Costs	Medicare	Medicaid	Uncompensated Care
National average	131%	12%	4%	1%	5%
New York	106	2	2	[a]	4
Rhode Island	109	4	1	1	3
Wyoming	111	5	3	2	3
Maryland	113	5	-4	[b]	8
Michigan	121	9	4	1	4
Utah	121	11	3	2	3
Washington	122	9	2	2	2
New Jersey	123	8	2	-2	9
Oregon	124	11	1	2	5
Massachusetts	124	9	2	1	7
Pennsylvania	125	9	5	1	3
Wisconsin	125	11	4	2	3
Ohio	128	11	5	[a]	5
Alaska	129	13	3	2	[a]
Nebraska	129	13	8	3	2
Colorado	129	14	6	2	4
Iowa	130	12	6	1	2
Kentucky	131	12	5	[a]	4
Vermont	133	13	2	4	4
Indiana	134	14	6	-1	4
New Mexico	135	14	2	3	6
New Hampshire	137	16	6	-2	5
Oklahoma	137	14	3	2	6
Connecticut	138	15	9	4	5
Missouri	139	14	5	3	5
Montana	139	14	6	2	3
Illinois	140	16	6	4	3
Maine	141	15	11	-1	4
Tennessee	141	15	6	[b]	7
South Dakota	142	16	7	1	2
Florida	143	15	5	3	6
California	144	13	4	2	5
Texas	144	16	6	-1	5
West Virginia	144	13	5	-3	7
Virginia	145	16	3	-1	8
Mississippi	148	16	4	[b]	8
North Carolina	148	18	5	1	6
Nevada	148	19	5	2	8
Georgia	150	19	6	2	7
Delaware	157	20	10	[a]	7
South Carolina	164	20	7	-3	7

Note: Gains or losses calculated as the difference between the payment received from each payer and the cost of treating its patients, including both inpatient and outpatient services and with subsidies from state and local governments considered payments for uncompensated care, up to the level of each hospital's uncompensated care costs. Due to reporting inconsistencies related to Medicaid disproportionate share payments and provider-specific taxes, the sample of hospitals was insufficient for Alabama, Arizona, Arkansas, District of Columbia, Hawaii, Idaho, Kansas, Louisiana, Minnesota, and North Dakota. There are significant margins of error for the numbers related to all payers in 1992.

[a] Less than 0.5 percent.

[b] Less than -0.5 percent.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

relying heavily on Medicaid DSH payments. Maryland, on the other hand, is completely different. As mentioned earlier, its rate setting system is designed to treat all payers equally, and it consequently was the only state with actual gains from both Medicare and Medicaid payments in 1992. The level of cost shifting in Maryland might have been nearly as low as in New York, except that it had a much greater uncompensated care burden after accounting for government operating subsidies.

Hospitals in South Carolina and Delaware relied the most on cost shifting in 1992. Each of these states had an aggregate margin on private sector payments that was about 10 times higher than New York's. Both had among the largest Medicare losses, largely because of their above-average costliness.[18] They also had in common unusually high uncompensated care costs and, had they not received liberal Medicaid payments, hospitals in both states would have needed to cost shift even more.

STATE REGULATORY AND LEGISLATIVE REFORMS

State governments can, to varying degrees, affect the delivery and financing of health care services within their borders. Historically, states have exhibited little direct control over the provision of health care; state oversight generally has been limited to licensing health care professionals and institutions. As the primary regulators of insurance, states also can influence the health care system through requirements they impose on the health insurance industry.

States' involvement in health care increased greatly in 1966 with the implementation of the Medicaid program. Administered at the state level and financed jointly by the Federal and state governments, Medicaid pays for medical services on behalf of certain low income and disabled groups. States have considerable discretion in determining eligibility criteria, services provided, and payment methodologies under the program. As a result of Medicaid, states became directly responsible for financing and overseeing health care services for a large segment of the population.

States' regulatory roles further expanded in the early 1970s when Federal funding was authorized under the National Health Planning and Resources Development Act of 1974. This law required states to establish health planning programs to create comprehensive areawide health plans and conduct Certificate of Need programs to review and approve capital expenditures. After Federal funding was eliminated in the 1980s, however, a number of states deemphasized their health planning programs.

Additionally, during the 1970s a number of states began experimenting with regulating payment rates as an alternative to cost-based reimbursement for health care services. Rate setting attempts to control health care expenditures by regulating per-unit spending. These programs, which set rates for some or all payers, initially focused on hospitals and subsequently on nursing facilities. Rate setting was deemphasized during the deregulation era of the 1980s, although most states use some form of prospective payment for Medicaid hospital and nursing facility services.

Most recently, the alarming rise in health care spending—particularly in the Medicaid program—and the growing number of people without health insurance have forced states to address health care issues more actively. Over the last five years, every state has enacted some type of health care legislation. These laws include incremental measures, such as medical malpractice and health insurance reforms. A number of states also have revived their health planning programs, focusing more on reviews of major medical equipment purchases and development of specialized services than on building construction. Some states have implemented reforms to expand Medicaid eligibility to uninsured persons, and several have passed comprehensive measures that seek to restructure their entire health care system.

Incremental reforms, by their very nature, are relatively straightforward to implement. By contrast, comprehensive reform measures, which generally combine goals of cost containment and universal coverage, are the most difficult and time-consuming to put in place because they affect the entire health care system. Measures that modify and expand Medicaid also are major initiatives; in general, however, these initiatives are implemented more quickly than measures that affect the privately insured population.

This section discusses recent developments in major reforms enacted at the state level, including comprehensive and Medicaid reforms. It also highlights developments in several other state regulatory measures that influence the delivery and financing of health care at the state level, including rate setting, health insurance reforms, "any willing provider" statutes, and rural health programs.

Comprehensive Reforms

To date, seven states—Florida, Hawaii, Massachusetts, Minnesota, Oregon, Vermont, and Washington—have passed comprehensive health care reform legislation. Enacted in April 1993, Washington's plan is the most recent. Except for Hawaii's plan, which has been in place since the early 1970s, the comprehensive reforms passed by these states are in varying stages of implementation.[19] No other state is on the verge of enacting a comprehensive measure for various reasons, including anticipation of Federal reform. The governor of Colorado believes his state should wait to see what occurs at the Federal level before proceeding with a plan that has been under discussion for several years.[20]

Certain Federal laws may hinder implementation of comprehensive reforms. To bypass these mandates, states must receive Federal waivers. One of the most significant legislative barriers to comprehensive reform at the state level is the Employee Retirement Income Security Act (ERISA) of 1974. Established primarily to protect workers' private pension rights, ERISA limits states' abilities to regulate employers' self-insured health plans. In 1992, 44 percent of private sector employees were enrolled in these plans. (See Chapter 3.) Without an ERISA waiver, states effectively cannot impose all-inclusive standard benefit packages, employer mandates, or premium taxes to help finance uncompensated care.

In 1974, Hawaii received a waiver from ERISA because its health care reform plan was passed before ERISA became law. No other state has received an ERISA waiver, although a provision in the Omnibus Budget Reconciliation Act (OBRA) of 1993 provides a strong tax incentive for self-insured plans in New York to comply with state health insurance and other laws.[21] This provision, however, expires in May 1995.

States that have enacted comprehensive legislation face a number of hurdles before a plan is fully implemented. These reforms typically require substantial legislation that spans several years. The initial enabling legislation usually is general in nature, addressing major themes and goals, while subsequent legislation addresses the details necessary to accomplish these goals. Often, a commission is created to develop specific plans.

While additional time may be necessary for states to develop specific implementation plans, the lag also poses some risks. If multiple rounds of legislative action are required before implementation, a change in a state's political and fiscal environment can alter or delay reform before it begins. Massachusetts, for example, passed a comprehensive measure in 1988 that contained an employer coverage mandate. A recession, combined with a new governor, led the legislature to delay implementation until 1995; whether the law will ever be implemented is now uncertain. Similarly, implementation of Oregon's universal coverage legislation, enacted in 1989, has been delayed from 1995 until 1997. In 1994, state legislatures in Minnesota and Florida are debating issues that could have a major impact on their already-passed reform measures.

The states that recently have passed comprehensive legislation are pursuing different approaches to achieving goals of universal coverage and cost containment. Washington, for example, plans to increase health insurance coverage by requiring employers to pay a portion of health insurance premiums and to contain costs by imposing limits on growth in premiums. Minnesota and Vermont also have statewide spending limits. By contrast, Florida hopes to achieve universal access and cost containment through voluntary, market-based efforts.

All the recent comprehensive reform measures encourage the use of managed care arrangements. In Minnesota, health care will be delivered principally through integrated service networks, which are groups of providers that will furnish a full range of coverage for a predetermined, capitated premium. Care delivered outside of the networks will be subject to a provider fee schedule.

Florida and Washington are relying on variations of managed competition to achieve universal coverage and cost containment; Vermont is leaning that

way. Managed competition can encompass a variety of proposals, but broadly defined it involves the creation of entities through which individuals and employers can purchase health care coverage. Under Florida's law, the purchasing entities—known as Community Health Purchasing Alliances—negotiate with health plans to provide health insurance to alliance members. Enrollment is voluntary, and currently only small businesses and state employees can participate. Florida lawmakers are debating legislation that would expand alliance participation to Medicaid enrollees. Health plans have already submitted premium bids to the alliances; initial bids varied from 20 percent less to 20 percent more than similar coverage offered in 1993. Washington also intends to use health purchasing entities, but implementation is still several years away. Under its legislation, four purchasing cooperatives will be developed, and all individuals and employers will be permitted to join.

Medicaid Reforms

To extend health coverage to more people and to contain costs, several states are reforming their Medicaid programs. These reforms expand Medicaid eligibility to additional low-income, uninsured persons.

Broadening access to people who are not now covered under Medicaid, however, hinges on efforts to control rising Medicaid costs. States' shares of Medicaid funding represent a large and growing proportion of state budgets. In 1990, Medicaid became the second highest state spending category, behind elementary and secondary education. As a share of total state expenditures, Medicaid spending increased from 10 percent in 1987 to 18 percent in 1993; 34 states experienced double-digit growth in total Medicaid payments between 1992 and 1993.[22]

All the major Medicaid reform initiatives seek to control costs through mandating managed care arrangements.[23] These arrangements range from health maintenance organizations to primary care case management systems. Health maintenance organizations provide a comprehensive set of services in exchange for a predetermined capitated amount per enrollee. Fee-for-service reimbursement is retained under case management systems, but recipients must obtain prior approval for services from a physician, who receives an additional fee to monitor individuals' service usage.

States must obtain a waiver from Federal Medicaid requirements if they wish to continue to receive Federal financial support for their reforms. States desiring to expand Medicaid eligibility generally pursue a waiver under Section 1115 of the Social Security Act. Only a few states have received these waivers; more common are those under Section 1915(b) of the Act, which are necessary for states seeking to require Medicaid recipients to enroll in managed care arrangements.

Section 1115 Waivers—Section 1115 waivers are reserved for major demonstration programs that the Federal government views as experimental. The waivers generally are for a limited time—usually from three to five years—and require a tightly structured research design. In addition, states must demonstrate that the plan will not cost the Federal government more than it otherwise would have spent for Medicaid services. Usually, these programs initially require additional state funding from provider taxes or other measures.

Historically, obtaining a Section 1115 waiver has been a cumbersome and time-consuming process for states. Besides providing implementation schemes, waiver applications were required to show research value and a rigorous evaluation methodology. Before 1993, only Arizona operated a statewide program under a Section 1115 waiver. In 1993, the Federal government streamlined the waiver process and eased some of the requirements. Subsequently, five state plans—Hawaii, Kentucky, Oregon, Rhode Island, and Tennessee—have received waivers; a number of other states, including Florida, Ohio, and South Carolina, have submitted waiver applications.

Under most of the demonstration programs, anticipated savings from using managed care will be employed to help fund the expansion of eligibility to low-income, uninsured persons. Compared with the traditional Medicaid program, these arrangements offer a more generous set of benefits, though they exclude long-term care. Except for Oregon and Kentucky, all the plans require some form of recipient cost sharing.

Several states have begun implementing their Section 1115 demonstration programs, beginning with Tennessee and Oregon in early 1994. As mentioned earlier, these programs are somewhat less

time-consuming to implement than comprehensive measures, usually because they are dealing only with that subset of the state population lacking health insurance. In addition, as public initiatives, the programs do not affect health care provided to privately insured persons.

Oregon—In March 1993, the Oregon demonstration program received the first Section 1115 waiver granted by the Federal government under the current Administration. The program is unique in that it eliminates coverage for certain services deemed to be of lower priority to generate savings for expanding coverage to everyone who is uninsured and whose income is at or below 100 percent of the Federal poverty level. All recipients are required to enroll in some form of managed care arrangement. To encourage managed care provider participation, the state has raised payment levels for their services. Currently, there is no recipient cost sharing.

Oregon had estimated that some 120,000 uninsured people would enroll in its program within the first year. While initial enrollments were higher than expected, it is unclear whether this is because the state has more uninsured than it originally estimated, or if people are enrolling faster than anticipated.

Tennessee—Tennessee's demonstration project, known as TennCare, was proposed in June 1993 and received its Section 1115 waiver in November; implementation began on January 1, 1994. The program includes all those eligible for Medicaid, as well as residents who were uninsured as of March 1, 1993. Everyone who is eligible must enroll in a managed care arrangement.

Unlike Oregon, Tennessee's health care providers have been reluctant to participate in TennCare for various reasons, including low payment rates. The short implementation time frame also complicated the state's efforts to build provider consensus before the plan began. In January, the Tennessee Medical Association filed a lawsuit charging that TennCare violated state law by not allowing public review and comment on the program's rules.

Rhode Island—Rhode Island's program, known as RIte Care, is scheduled to begin June 1, 1994. It calls for a smaller expansion of the eligible population than in Oregon and Tennessee. Under the program, pregnant women and children under six in families with incomes up to 250 percent of the Federal poverty level will be covered; previously these levels were 185 percent and 133 percent, respectively. All participants will receive care through managed care arrangements.

The RIte Care benefit package reflects the needs of the population it targets. Compared with the traditional Medicaid benefits, more primary and preventive care services are covered. The package also includes outreach measures such as transportation services.

Kentucky—Kentucky's demonstration project, approved in late 1993, is awaiting legislative action on how it will be financed. The plan would expand Medicaid coverage to all residents below 100 percent of the poverty level, with participation phased in over a five-year period. All participants would be enrolled in managed care arrangements.

Kentucky plans to rely on managed care cost savings and an increase in its provider-specific tax to finance its program. If the increase is not passed in the 1994 legislative session, the expansion provisions of the plan may be delayed.

Hawaii—Because Hawaii already has achieved nearly universal health care coverage, its demonstration program focuses more on restructuring health care delivery for low-income people than on expanding access.

Known as Health Care QUEST, the program relies on a managed competition model to provide services. Enrollees in three existing state programs, Medicaid, General Assistance, and the State Health Insurance Program, will be combined to form one large purchasing pool. Private health organizations will bid on a standard benefit package. Participants will remain in the QUEST program so long as their incomes do not exceed 300 percent of the Federal poverty level.

Section 1915(b) Waivers—Waivers under Section 1915(b) of the Social Security Act permit states to restrict Medicaid recipients' freedom in choosing health care providers. Under the Medicaid statute, recipients are free to choose among participating providers. Such waivers generally are requested when a state seeks to require managed

care arrangements for its Medicaid population without expanding eligibility requirements.

Section 1915(b) waivers encompass a variety of programs and geographic regions within states. About 20 states have received these waivers to implement some type of mandatory managed care arrangements; in 1993, the number of approved waiver applications increased by about 30 percent.

Rate Setting

As a result of court rulings involving the ERISA statute, several states are reassessing their rate setting programs. Until recently, Connecticut, Maryland, New Jersey, and New York had retained some form of multiple-payer rate setting; only Maryland, however, has a current Federal waiver to include Medicare under its rate setting program. The ERISA rulings have important implications for any state that is considering rate setting because of the large number of residents enrolled in ERISA-exempt health insurance plans.

State rate setting programs often apply a surcharge to all hospital rates—including those paid by self-insured plans—to cover hospitals' uncompensated care costs. Under ERISA, however, employer self-insured plans are exempted from state insurance laws. Federal district courts in Connecticut, New Jersey, and New York, have ruled that application of a surcharge to rates paid by self-insured plans violates ERISA.[24] While an appeals court in the New Jersey case subsequently overruled this decision, New Jersey had already deregulated its program and has no plans to reinstate it.[25] Appeals are pending in Connecticut and New York, although in 1994 Connecticut dismantled its rate setting program and deregulated hospital prices. By contrast, New York—which received the favorable ERISA provision in OBRA 1993—has extended its hospital rate setting program for two years.

Whereas ERISA has caused several states to reevaluate their rate setting programs, Maryland is expanding its program. Since rate setting was implemented in 1976, Maryland's hospital costs have declined from 25 percent above the national average to more than 14 percent below it in 1992.[26] In 1993, the state passed a law to begin regulating physician payment rates. The methodology will be similar to the resource-based relative value system used to pay physicians under Medicare. The system is scheduled to begin in 1995. Interestingly, there is no ERISA suit currently pending against Maryland's program. This suggests that the rate structure may be widely accepted in Maryland, perhaps because there are only small differentials across types of private payers.

Health Insurance Reforms

States also are focusing reform efforts on private health insurance, specifically "small market" reform, which addresses problems faced by small group or individual purchasers. Most private health insurance is provided through the workplace, yet 80 percent of the uninsured in 1992 lived in families headed by employees. Nearly half of uninsured workers were either self-employed or working in firms with fewer than 25 employees.[27] Many small companies do not provide health insurance for their workers because of the costs.[28] Small businesses cannot self-insure and must purchase health insurance through the commercial markets. They tend to pay higher premiums for insurance partly because they lack bargaining power.

In 1993, 46 states passed some form of small market reform.[29] Many of these laws target insurers by, for example, requiring them to issue policies to anyone who applies regardless of their health status; others require insurers to guarantee the renewal of insurance policies. Massachusetts, New York, and Vermont have implemented community rating laws that prohibit the use of health status or prior utilization of health care services in setting premium rates. ERISA, however, may limit states' abilities to implement insurance reform. A court in New York held that high risk pools—in which insurance companies having healthier subscribers pay a surcharge to compensate those with a larger proportion of costly enrollees—violated ERISA because the surcharge was applied to health maintenance organizations that enrolled self-insured subscribers.[30]

Several states are attempting to increase insurance coverage by encouraging small businesses to consolidate their market power and lower their administrative costs by forming purchasing pools or alliances. In 1992, California created the first

statewide insurance-purchasing pool for small businesses—the Health Insurance Plan of California. The plan actively negotiates premiums for small employers who choose to participate. Health plans also participate on a voluntary basis and, thus far, all the provider participants are managed care groups. Employers that participate must agree to pay at least 50 percent of the lowest-cost plan.

In its first year of implementation, the Health Insurance Plan negotiated premium rates that were 5 percent below rates for comparable insurance packages offered by nonparticipating plans. Newly negotiated rates, effective in fiscal year 1994, will be about 6 percent lower than they were in 1993.

California's plan has been able to reduce insurance premiums for small businesses, but whether this has increased insurance coverage is unclear. It was created in the same legislation that implemented a number of other insurance reforms. Even though 20 percent of the employees currently participating in the plan were previously uninsured, this expanded participation is not greater than that seen in the California health insurance market generally after other health insurance reforms became effective.[31] Other research has concluded that it is difficult to stimulate small businesses to purchase health insurance for their employees, even when premiums are reduced by 25 percent to 50 percent of prevailing rates.[32]

Any Willing Provider Statutes

State regulation of managed care has increased significantly, corresponding to the greater use of managed care in general. State oversight includes fiscal requirements as well as governance and ownership criteria. Any willing provider statutes are another tool some states use to regulate managed care arrangements. They generally prohibit health plans from excluding any provider that is willing to accept the plan's payment rates and can meet its participation criteria.

Managed care plans seek to concentrate service usage among selected providers in order to obtain volume discounts and facilitate the monitoring of provider practice patterns. Many people believe any willing provider statutes could be a major deterrent to forming effective integrated health care networks.

At least 15 states have some type of any willing provider law in place. These may be broadly worded or targeted to a particular provider group; for example, several states forbid plans from excluding pharmacies. While a number of bills were introduced in state legislatures in 1993, only a few were enacted.[33]

Rural Initiatives

Health care financing and delivery in rural areas pose unique problems for states. In contrast to urban areas, where cost containment is a primary goal, the central issue in rural areas often is to ensure access to care. Provider shortages, along with transportation barriers, are concerns for all states with substantial rural populations.

Reform efforts in rural areas focus on the development of rural health networks. The structure of these networks varies depending on the geographic area, the number of available providers, and community needs. Some network models link small rural hospitals with urban tertiary care centers; others are broader, and include social and public health services. The goal of the networks is to provide a full complement of health care services to rural residents, while avoiding service duplication.

New York, which has encouraged the development of rural health networks since 1986, has recently stepped up these efforts. The comprehensive reform legislation in Florida, Minnesota, and Washington also provides for the development of rural health networks.

The Federal government is furnishing financial assistance to several states to help them develop rural health care networks. The Essential Access Community Hospital/Rural Primary Care Hospital program is intended to ensure the availability of primary care, emergency services, and limited acute inpatient services in those rural areas where it is difficult to maintain a full-service hospital. Funding under the program currently is limited to seven states—California, Colorado, Kansas, New York, North Carolina, South Dakota, and West Virginia. Thus far, four networks have been put in place in Kansas, South Dakota, and West Virginia.

CONCLUSIONS

Understanding the variation in health spending at the state level, as well as state programs designed partly to control that spending, will be critical to the process of planning for health reform. Decisions will have to be made concerning states' roles in overseeing the future health care system and whether health spending should be limited at the state level. If state expenditure limits are adopted, additional decisions will be needed about how the limits will be set and who will be responsible for monitoring and enforcing them.

State-level spending variation is best analyzed using a per capita measure, because this is the only way to capture the net effect of geographic differences in service use and expenditures per unit across all health sectors. However, it is also important to consider the major factors causing geographic differences, especially those that might be recognized in future policies. These include patient migration, age and sex distributions, health status, and input prices. Furthermore, understanding the effects of variables that offer considerable potential for control through health policy and management, such as the utilization of services and supply of resources, is also important in assessing the feasibility and desirability of various cost-containment alternatives.

Only one state—Hawaii—has fully implemented a comprehensive reform plan designed to expand health insurance coverage to nearly the entire population and to control the spiraling growth in health spending. However, several states are in various stages of developing and implementing comprehensive reform plans, and others are implementing more narrowly focused reforms. These state efforts are important from two different perspectives: They may provide experience that will benefit policy makers in charting the course for reform at the national level, and they may lead to both the desire and capability of some states to play a major role in future reform efforts. It will continue to be important to monitor the implementation of state reforms and to evaluate their effectiveness over time.

Notes to Chapter 4

1. The state level adjustments to the 1991 population estimates for the census undercount were developed by the U.S. Bureau of the Census.

2. ProPAC will isolate the expenditures for the elderly and then combine the Medicare program payments made for this group with payments made by secondary payers and the beneficiaries themselves. An increment will then be added to account for the value of care provided to the elderly in Department of Veterans Affairs and Department of Defense facilities. The final step will be to adjust the estimates for differences in age and sex distribution and for input price variation.

3. Per capita spending in the District of Columbia is considerably higher than that in any of the states, but the District was omitted from the analysis because it presents an anomalous set of cost-influencing factors. Its providers furnish proportionately more of their services to out-of-state residents than any of the states, and the fact that it is entirely a large city means that it has higher than average input prices and more than the usual amount of medical education activity and use of tertiary care facilities.

4. These data, which are aggregated by patient residence, were provided by the Department of Defense, Office of Health Affairs. Similar data are being prepared for ProPAC by the Department of Veterans Affairs, Management Science Group.

5. Beth Hahn and Doris Lefkowitz, *Annual Expenses and Sources of Payment for Health Care Services.* National Medical Expenditure Survey Research Findings 14, AHCPR Pub. No. 93-0007 (Rockville, MD: Public Health Service, November 1992), Table 2.

6. Ibid., Table 1.

7. Ibid.

8. U.S. Department of Health and Human Services, National Center for Health Statistics, *Health, United States,* 1992, DHHS Pub. No. (PHS) 93-1232 (Hyattsville, MD: U.S. Public Health Service, August 1993), Table 85.

9. Prospective Payment Assessment Commission, *Adjustment to the Non-Labor-Related Portion of the Standardized Amounts*, Congressional Report C-89-03, August, 1989, 6-12.

10. Group Health Association of America, Inc., *Patterns in HMO Enrollment* (Washington, DC: GHAA, 1993) 12.

11. The number of physicians needed to remove each state's designated Health Profession Shortage Areas was obtained from the Office of Technology Assessment, *Health Care in Rural America*, (Washington, DC: OTA, 1990) 297. These data were matched with state-level population estimates that were adjusted for the 1990 census undercount using information from the U.S. Bureau of the Census.

12. Hahn and Lefkowitz, *Annual Expenses and Sources of Payment,* Table 1.

13. The Codman Research Group, Inc., *The Relationship Between Declining Use of Rural Hospitals and Access to Inpatient Services for Medicare Beneficiaries in Rural Areas,* ProPAC Extramural Technical Report No. E-90-01, January 1990, 12-16; and Prospective Payment Assessment Commission, *Medicare and the American Health Care System, Report to the Congress,* June 1993, 124-26.

14. Some additional losses are also generated by other government payers, such as workers' compensation and the Civilian Hospital and Medical Program of the Uniformed Services (CHAMPUS), and a small amount of above-cost payments are made by patients paying directly.

15. The American Hospital Association expanded its Annual Survey of Hospitals for 1992 to collect data on Medicaid provider-specific taxes and to separate disproportionate share payments

from base Medicaid payments. In numerous cases, the AHA experienced difficulty in obtaining consistent Medicaid data, resulting in the need to drop many hospitals from the sample used for this analysis. This, in turn, resulted in an insufficient sample size for nine states and the District of Columbia.

16. The Medicaid payment to cost ratio for Louisiana's hospitals was thought to be even higher than this in 1992. However, the sample of hospitals available was too small to derive a reliable average.

17. In ProPAC's 1993 report, *Medicare and the American Health Care System*, Rhode Island's PPS costs per case in the eighth year of PPS, standardized for wage differences and average case-mix index, was 8 percent below the nationwide average compared with New York's, which was 18 percent above average.

18. In ProPAC's study of standardized costs, reported in the 1993 edition of *Medicare and the American Health Care System*, the costs per case in South Carolina and Delaware were 9 percent and 7 percent above average, respectively.

19. Hawaii continues to refine its system. As discussed in a later section, Hawaii received a Medicaid demonstration waiver in 1993 to develop a system that covers virtually all of its citizens.

20. "Colorado Should Wait for Federal Plan Before Creating Own System, Romer Says," *BNA's Health Care Policy*, June 24, 1994, 126.

21. Pub. Law No. 103-66, Section 1342.

22. National Association of State Budget Officers, *1993 State Expenditure Report* (Washington, DC: National Association of State Budget Officers, April 1994).

23. For a general discussion, see General Accounting Office, *States Turn to Managed Care to Improve Access and Control Costs*. GAO/HRD-93-46, March 1993.

24. See *New England Health Care Employees Union Dist. 1199 v. Mount Sinai Hospital,* 1994 U.S. Dist. Lexis 2181 (D. Conn. 1994); *United Wire Metal & Mach. Health & Welfare Fund v. Morristown Memorial Hospital,* 793 F. Supp. 524 (D.N.J. 1992); and *Travelers Insurance Co. v. Cuomo,* 1992 U.S. Dist. Lexis 19397 (S.D.N.Y. 1992), aff'd 14 F.3d. 708 (2d Cir. 1993).

25. *United Wire Metal & Mach. Health & Welfare Fund v. Morristown Memorial Hospital,* 995 F.2d 1179 (2d. Cir. 1993).

26. Information provided by the Maryland Hospital Rate Review Commission.

27. Employee Benefit Research Institute, *Sources of Health Insurance and Characteristics of the Uninsured,* Issue Brief Number 145, January 1994, 9-10.

28. W. David Helms, Anne Gauthier, and Daniel Campion, "Mending the Flaws in the Small-Group Market," *Health Affairs* 11(2):7-27, Summer 1992, 8.

29. George Washington University Intergovernmental Health Policy Project, *Health Insurance, An Overview of 1993 State Legislative Activity*, January 1994, 3.

30. *New York State HMO Conference v. Curiale,* unpublished decision (S.D.N.Y., Feb. 25, 1994).

31. Information provided by the California Managed Risk Medical Insurance Board.

32. Helms, Gauthier, and Campion, "Mending the Flaws."

33. Information provided by the Group Health Association of America.

Appendixes

Appendix A. Biographical Sketches of Commissioners

Stuart H. Altman, Chairman

Stuart H. Altman is the Sol C. Chaikin Professor of National Health Policy at the Florence Heller Graduate School of Social Policy at Brandeis University. An economist whose research interests are primarily in the area of Federal health policy, he has been at Brandeis since 1977. Between 1971 and 1976, Professor Altman was deputy assistant secretary for planning and evaluation/health at the Department of Health, Education, and Welfare (now the Department of Health and Human Services). From 1973 to 1974, he also served as the deputy director for health of the President's Cost of Living Council, where he was responsible for developing the council's program on health care cost containment. Professor Altman is a member of the Institute of Medicine of the National Academy of Sciences and a former member of its governing council, and serves on the board of Beth Israel Hospital (Boston). He is a past president of the Association for Health Services Research and a former board member of The Robert Wood Johnson Clinical Scholars Program. He has testified before the Congress on a wide range of health policy issues and has written an array of articles in the field. Professor Altman received a B.B.A. from the City College of New York, and both an M.A. and a Ph.D. in economics from the University of California, Los Angeles.

Susan S. Bailis

Susan S. Bailis is executive vice president and chief operating officer of The A•D•S Group, which specializes in long-term care and senior living. From 1983 to 1985, Ms. Bailis was associate director of New England Medical Center, where she managed the hospital's entry into the long-term care field. Earlier, she was director of social service at the medical center. Ms. Bailis has held a number of academic appointments, most recently as assistant professor of psychiatry at Tufts University School of Medicine. She serves on the boards of several hospitals and has held leadership positions in many local and national professional and community organizations. These include the Executive Committee of the American Health Care Association, first vice president of the Massachusetts Federation of Nursing Homes, the board of the Alzheimer's Disease and Related Disorders Association, secretary of the National Association of Social Workers, and president-elect of the Society for Hospital Social Work Directors of the American Hospital Association. She is a member of the Business Leadership Forum and Women's Leadership Forum of the Democratic National Committee. She also served as a member of the Massachusetts Medicaid State Advisory Board. Ms. Bailis has published and lectured widely on health care and social welfare policy. She received a B.A. from Brandeis University and an M.S.W. from Simmons College School of Social Work.

Richard A. Berman

Richard A. Berman is president and chief executive officer of Howe-Lewis International. Before joining Howe-Lewis, he was a vice president of Korn/Ferry International responsible for the health care practice in the firm's eastern region. Mr. Berman was previously a practice leader for health care at McKinsey & Company, Inc. He serves as a trustee of the State University of New York and is a member of the National Advisory Council for the National Institute of Nursing Research. In addition, he is a member of New York State's Health Care Financing Council, New York's Governor's Task Force on Health Reform, and the New York State Legislature's Review Panel on Empire Blue Cross Blue Shield. Mr. Berman was the executive vice president of New York University Medical Center from 1983 to 1986. He was a cabinet official for New York State from 1977 to 1982, first as director of the New York State Office of Health Systems Management and later as the commissioner of the Division of Housing and Community Renewal. Before that, Mr. Berman served as director of health policy for the U.S. Economic Stabilization Program, and as special assistant to the assistant secretary of health, Department of Health and Human Services. He has also held administrative positions at the New York Hospital, Cornell University Medical School, The Robert Wood Johnson Foundation, and the University of Utah Hospital. He is a member of the Institute of Medicine of the National Academy of Sciences and a fellow of the

American College of Healthcare Executives. Mr. Berman has published many articles in the health care field. He received B.A., M.B.A., and M.H.A. degrees from the University of Michigan.

James D. Bernstein

James D. Bernstein is director of the North Carolina Office of Rural Health and Resources Development, which has established 54 community-based health centers and recruited more than 1,100 providers to the state since 1973. He also serves as president of the nonprofit North Carolina Foundation for Alternative Health Programs. Previously, Mr. Bernstein administered a 40-bed hospital and eight health centers for the Indian Health Service. He has held a variety of professional positions, including chairman of the Rural Health Care Advisory Panel of the Office of Technology Assessment and chairman of the rural health steering committee of the National Academy for State Health Policy. He currently is project director for The Robert Wood Johnson Foundation initiative, Practice Sites: State Primary Care Development Strategies. Mr. Bernstein received a B.A. from The Johns Hopkins University and an M.H.A. from the University of Michigan.

Clay D. Edmands

Clay D. Edmands is president of Asbury-Salina Regional Medical Center in Salina, Kansas, an acute care rural referral center and an Equal Access Community Hospital. He was active in the development of Health Frontiers, Inc., a large multihospital organization that has been replaced by Voluntary Hospitals of America. His prior experience includes several years with the Fairview Hospital System in Minneapolis, Minnesota, where he held various positions, among them administrator for development and operations of regional health management and supportive services. Mr. Edmands participated on the Kansas Hospital Association Board from 1980 to 1992, serving as chairman, treasurer, and member of the executive committee. In addition to his two terms on the American Hospital Association Regional Policy Advisory Board, Mr. Edmands has been president of the Health Systems Agency of the Western Kansas Board. Other community involvements include the Salina Health Education Board and Voluntary Hospitals of America. Mr. Edmands has been a faculty preceptor for the University of Minnesota independent study program in hospital administration. He currently is a preceptor for the University of Kansas program in health care administration. He holds a B.S. in business administration from the University of Kansas and an M.H.A. from the University of Minnesota.

William S. Hoffman

William S. Hoffman has been director of the Social Security Department of the International Union of the U.A.W. since 1984. Previously, he was the assistant director and a consultant to the department. Dr. Hoffman is also director of the Michigan Health and Social Security Research Institute, Inc., where from 1973 to 1980 he was a senior research associate. An active participant in national and state health care issues, Dr. Hoffman has served on the Michigan Certificate of Need Commission, the Department of Health and Human Services' Council on Graduate Medical Education, the Department of Labor's Advisory Council on Employee Welfare and Pension Benefit Plans, the Governor's Task Force on Access to Health Care in Michigan, and various study committees of the Institute of Medicine of the National Academy of Sciences. He is a member of the National Academy of Social Insurance and an adjunct professor of sociology at Wayne State University. Dr. Hoffman has written and spoken extensively on such issues as the use of prepaid mental health care services and organized labor's perspective on current health care issues and legislation. He received a B.A. in psychology from Otterbein College, and M.A. and Ph.D. degrees in sociology from Wayne State University.

Clark E. Kerr

Clark E. Kerr is vice president of quality improvement at HealthExcellence, a not-for-profit public benefit corporation. He also is president of the California Business Group on Health, where he manages the legislative agenda. He chairs the California Health Policy and Data Advisory Commission, and the Consumer Experience Studies Committee of the Health Benefits Advisory Council for CalPERS. In addition, Mr. Kerr serves on the

boards of directors of the National Committee for Quality Assurance and the Washington Business Group on Health. Before joining HealthExcellence, he held various positions at Bank of America, including vice president of government relations, manager of corporate health programs, and manager of benefits planning. Mr. Kerr received a B.A. from the University of California, Davis and an M.B.A. from the University of California, Berkeley.

James R. Kimmey

James R. Kimmey is vice president for health sciences and professor of public health at the St. Louis University Health Sciences Center, as well as professor of community and family medicine at the St. Louis University School of Medicine. In addition, Dr. Kimmey has taught at the University of Wisconsin, The Johns Hopkins University, New York University, and Columbia University. He was administrator of the Division of Health Policy and Planning of the state of Wisconsin and executive director of the American Public Health Association in New York and Washington. Dr. Kimmey served as president of the American Health Planning Association (1980–81) and is a member of its board of directors. Former editor of *Health Planning Memorandum* and managing editor of the *American Journal of Public Health*, he has written extensively on health planning and other health policy topics. Dr. Kimmey received B.S., M.S., and M.D. degrees from the University of Wisconsin and an M.P.H. from the University of California, Berkeley.

David A. Kindig*

David A. Kindig is director of Programs in Health Management and professor of preventive medicine at the University of Wisconsin-Madison School of Medicine. He served as vice chancellor for health sciences at the university from 1980 to 1985. Dr. Kindig was director of Montefiore Hospital and Medical Center (1976–80) and deputy director of the Bureau of Health Manpower, Department of Health, Education, and Welfare (1974–76). A member of the Council on Graduate Medical Education, he recently resigned from the Prospective Payment Assessment Commission to become chair of this body. He is also on the boards of the Association of University Programs in Health Administration and the Association for Health Services Research. Dr. Kindig has served on the state of Wisconsin's Council for Uninsured Health Care Programs and chaired the Wisconsin Governor's Task Force on AIDS. A member of the editorial boards of *Medical Care Review* and *Health Affairs*, Dr. Kindig has written extensively on both medical and health policy issues. He received a B.A. from Carleton College, and M.D. and Ph.D. degrees from the University of Chicago School of Medicine.

Judith R. Lave

Judith R. Lave is professor of health economics and codirector of the Center for Research on Health Care at the University of Pittsburgh. Her primary academic appointment is in the Graduate School of Public Health, but she holds secondary appointments in the Department of Psychiatry, Department of Economics, and the Katz Graduate School of Business. She is a member of the research study section of the Agency for Health Care Policy and Research and of the Institute of Medicine's report review committee. Formerly, Dr. Lave was a faculty member at Carnegie-Mellon University. At the Department of Health and Human Services, she was director of the Division of Economic and Quantitative Analysis in the Office of the Deputy Assistant Secretary and director of the Office of Research in the Health Care Financing Administration. A charter member of the Federal government's Senior Executive Service, Dr. Lave is also a member of the Institute of Medicine of the National Academy of Sciences and the National Academy of Social Insurance. She is a past president of the Association for Health Services Research and the Foundation for Health Services Research. In addition, Dr. Lave chaired the technical panel on health and was a member of the expert panel on income and health care for the Advisory Council of Social Security. She serves on the editorial boards of both the *Journal of Health Politics, Policy and Law* and the Health Administration Press. Dr. Lave has served as a consultant to private and public agencies in both the United States and Canada. She received a B.A from Queen's University in Canada and a Ph.D. in economics from Harvard University.

Larry L. Mathis

Larry L. Mathis has, since 1983, been president and chief executive officer of The Methodist Hospital System in Houston, Texas, which includes 10 member corporations and The Methodist Hospital. Before that, Mr. Mathis held a number of positions at The Methodist Hospital. He is the speaker of the house of the American Hospital Association's House of Delegates and serves on the association's executive committee. He also is a governor of the American College of Healthcare Executives. Mr. Mathis is former chairman of The Greater Houston Hospital Council, the Texas Hospital Association, and the American Hospital Association. He is a former member of the administrative board of the Association of American Medical Colleges' Council of Teaching Hospitals and chaired the National Advisory Council on Health Care Technology Assessment from 1985 to 1988. Mr. Mathis was also a consultant to the Ministry of Education and Culture in Brazil and served in the U.S. Army from 1965 to 1970. He received a B.A. in social sciences from Pittsburg State University in Kansas and an M.H.A. from Washington University.

Robert J. Myers

Robert J. Myers was chief actuary of the Social Security Administration from 1947 to 1970 and deputy commissioner of Social Security from 1981 to 1982. Currently, he is a member of the Commission on the Social Security "Notch" Issue and the Committee of Actuaries of the United Nations Joint Staff Pension Fund, as well as president of the International Fisheries Commissions Pension Society. Mr. Myers is a trustee for several organizations, including the investment program (mutual funds) of the American Association of Retired Persons, and serves on the boards of advisers of The Seniors Coalition and Studies on Smoking. An active participant in retirement and pension plan issues, Mr. Myers chaired the Commission on Railroad Retirement Reform (1988–90) and the Railroad Unemployment Compensation Committee (1983–85). He was also executive director of the National Commission on Social Security Reform (1982–83). In addition, Mr. Myers has served as an actuarial consultant to various congressional committees, and as a technical adviser on Social Security and pension programs to numerous foreign countries. Besides holding several teaching positions, he has published on the topics of Social Security and retirement. In addition, Mr. Myers is a past president of both the American Academy of Actuaries and the Society of Actuaries. He received a B.S. degree from Lehigh University, an M.S. degree from the University of Iowa, and honorary degrees from Lehigh University and Muhlenberg College.

Donald R. Oder

Donald R. Oder is executive vice president and chief operating officer of Rush-Presbyterian-St. Luke's Medical Center in Chicago, where he formerly was senior vice president. Before that, he was audit manager with Arthur Andersen & Co. in Chicago. Mr. Oder has held various academic appointments and currently is a professor in the Department of Health Systems Management at the Rush University College of Health Sciences. He is a member of and has held leadership positions in several professional associations, including the American College of Healthcare Executives, the American Hospital Association, the Illinois Hospital Association, Voluntary Hospitals of America, the American Institute of Certified Public Accountants, and the Illinois C.P.A. Society. He has served on the board of directors of the Better Business Bureau of Metropolitan Chicago, Inc., and on the occupational health committee of the Chicago Association of Commerce and Industry. Mr. Oder received a B.S. from Wichita State University, a C.P.A. certificate from the University of Illinois, and an M.B.A. from the University of Chicago.

Elliott C. Roberts, Sr.

Elliott C. Roberts, Sr., is chief executive officer of the Medical Center of Louisiana (formerly Charity Hospital at New Orleans), a position he has held since 1984. In this capacity, he assisted in the implementation of the reorganization of the Louisiana State Department of Health and Human Resources, which ultimately became the Louisiana Health Care Authority. Mr. Roberts holds an assistant professorship in the Department of Public Health and Preventive Medicine at Louisiana State University Medical School. He is also an adjunct

professor and preceptor in the Department of Health Systems Management at Tulane University School of Public Health and Tropical Medicine. From 1980 to 1984, Mr. Roberts was chief executive officer of Cook County Hospital in Chicago. Before that, he was vice president and associate project director for Hyatt Medical Management Services, as well as commissioner of hospitals and executive director of Detroit General Hospital. Mr. Roberts served as executive director at both Harlem Hospital Center (1969–72) and Mercy Douglass Hospital in Philadelphia (1965–69). An active member of the American Hospital Association (AHA), Mr. Roberts served on its board of trustees for five years as well as on the nominating committee, in the House of Delegates, and in other capacities. He is a past chairman of the Metropolitan Hospital Constituency Section of the AHA. Mr. Roberts has held similar positions of responsibility at the National Association of Public Hospitals and the Association of American Medical Colleges' Council on Teaching Hospitals. He is also a diplomat of the American College of Healthcare Executives. In addition to many other appointments, Mr. Roberts served on the Secretary's Commission on Nursing, Department of Health and Human Services. He received a B.A. from Morgan State College and an M.A. in business administration-hospital administration from the George Washington University.

J. Michael Sadaj

J. Michael Sadaj is a physician in private practice and a member of Rocky Mountain Clinic in Butte, Montana, where he specializes in internal medicine and pulmonary diseases. He has served as secretary-treasurer, vice president, and president of St. James Community Hospital medical staff, as well as chief of the department of medicine and chairman of the credentialing committee. From 1979 to 1990, Dr. Sadaj was medical director of respiratory therapy and the pulmonary laboratory at St. James. For several years, Dr. Sadaj served on the Occupational Diseases Board of the State of Montana. He is a past president of the Montana Medical Association (1988–89) and has been a member of the executive committee since 1985. In addition, he has served as a delegate to the American Medical Association (AMA) Resident Physician Section, Young Physician Section, and the AMA House of Delegates. From 1977 to 1979, he was the resident member on the AMA Council on Constitution and Bylaws. He is a founding member of the board of directors of the Montana Professional Assistance Program, and was a member of the Rural Physician Retention Trust Fund Advisory Board. In 1984, he was elected to the Butte-Silver Bow Government Study Commission. From 1974 to 1979, Dr. Sadaj was a resident in internal medicine and a fellow in pulmonary diseases at the University of Nebraska Medical Center. Dr. Sadaj received B.S. and M.D. degrees from the University of Nebraska.

J. B. Silvers**

J. B. Silvers is codirector of the Health Systems Management Center of Case Western Reserve University. He is also the William M. and Elizabeth C. Treuhaft Professor of Management in the Department of Banking and Finance at the university's Weatherhead School of Management, and professor of epidemiology and biostatistics at the School of Medicine. Before joining Case Western Reserve, Dr. Silvers was a faculty member at the business schools of Indiana, Harvard, and Stanford. At Harvard, he directed the Program for Financial Management and Strategy in Health for five years and served on the faculty of the Program for Health Systems Management for 10 years. Dr. Silvers served the Department of Health and Human Services as a member of the Secretary's Commission on Nursing and as a member of the Health Care Technology Study Section of the National Center for Health Services Research (now the Agency for Health Care Policy and Research). During 1983–84, he chaired the Governor's Commission on Ohio Health Care Costs. He has written extensively in the fields of corporate financial management, and health care and hospital finance. Recently, his research has focused on hospital capital investment, nursing labor markets, competition under health care reform, and return to work after hospitalization. He also serves as a consultant or adviser to numerous private organizations and as a member of the boards of a large not-for-profit dialysis center and a point-of-service health plan. Dr. Silvers received a Ph.D. in finance from Stanford University, and M.S. and B.S. degrees from Purdue University in industrial administration and engineering, respectively.

Roxane B. Spitzer-Lehmann

Roxane B. Spitzer-Lehmann is national strategic adviser, MEDICUS Systems, and visiting professor in the School of Business at the University of Colorado. Previously, she was corporate vice president of St. Joseph Health System in Orange, California, and chief operating officer of the Good Samaritan Hospital in Los Angeles. She holds various professorships at Texas Tech University Health Sciences Center; University of Southern California; University of California, Los Angeles; and Vanderbilt University. From 1981 to 1988, Dr. Spitzer-Lehmann was vice president, patient care services, at Cedars-Sinai Medical Center. Previously, she was director of nursing and practiced nursing in both inpatient and public health settings. She is a fellow of the American Academy of Nursing, a diplomat of the American College of Healthcare Executives, and serves on many other boards. Dr. Spitzer-Lehmann has written and spoken extensively on such issues as managing nonprofit organizations, cost containment, quality and productivity, nursing in the 1990s, and strategic management and leadership. She received a B.S. from Adelphi University, an M.A. in nursing service administration from Columbia University, and both an M.A. in management and an M.B.A. from Claremont Graduate School. She holds a Ph.D. in management from the Peter Drucker Management Center, Claremont Graduate School.

Jae L. Wittlich

Jae L. Wittlich is senior vice president and chief operating officer, group benefits, CNA Insurance Companies. He also served as vice president of the group benefits department from 1985 to 1990 and as vice president of the group operations division from 1977 to 1985. Before joining CNA Insurance, Mr. Wittlich was with Allstate for 12 years, most recently as assistant vice president of group life and health operations. Besides being a member of the executive committee and board of directors of the Association of Private Pension and Welfare Plans, he serves on the boards of directors of the CNA Insurance Companies; Private Healthcare Systems, Inc.; the Foundation for Health Enhancement; Managed Healthcare Systems of New York; and the Health Insurance Association of America. In addition, Mr. Wittlich has served on many other industry association committees and lectured frequently on health care topics. He received the 1990 Health Insurance Association of America's Founders Medal. Mr. Wittlich is a fellow of the Society of Actuaries and a member of the American Academy of Actuaries. He holds B.A. and M.A. degrees from the University of Michigan.

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*Resigned 1994
**Term expired 1994

Appendix B. Glossary

The following acronyms and terms are frequently referenced in Prospective Payment Assessment Commission (ProPAC) reports. Many definitions are from various Health Care Financing Administration publications and other sources, including the American Hospital Association, the Congressional Budget Office, the Congressional Research Service, the Institute of Medicine, the Office of Management and Budget, and the Physician Payment Review Commission, as well as the September 1, 1983, *Federal Register,* Volume 48, Number 171. Where necessary, ProPAC has developed definitions consistent with its use of the terms in Commission documents.

ACRONYMS

AAPCC	Adjusted Average Per Capita Cost
AFDC	Aid to Families with Dependent Children
AHA	American Hospital Association
AHCPR	Agency for Health Care Policy and Research
AIDS	Acquired Immune Deficiency Syndrome
ASC	Ambulatory Surgery Center
CABG	Coronary Artery Bypass Graft
CBO	Congressional Budget Office
CHAMPUS	Civilian Health and Medical Programs of the Uniformed Services
CMI	Case-Mix Index
CON	Certificate of Need
CORF	Comprehensive Outpatient Rehabilitation Facility
CPI	Consumer Price Index
CRS	Congressional Research Service
CT	Computerized Tomography
DRG	Diagnosis-Related Group
DSH	Disproportionate Share
EBRI	Employee Benefit Research Institute
ECI	Employment Cost Index
ERISA	Employee Retirement Income Security Act of 1974
ESRD	End-Stage Renal Disease
ESWL	Extracorporeal Shock Wave Lithotripsy
FASB	Financial Accounting Standards Board
FDA	Food and Drug Administration
FFS	Fee for Service
FR	Federal Register
FTE	Full-Time Equivalent
GAO	General Accounting Office
GDP	Gross Domestic Product
GHAA	Group Health Association of America
HCFA	Health Care Financing Administration
HHA	Home Health Agency
HHS	Health and Human Services, Department of
HIAA	Health Insurance Association of America
HIV	Human Immunodeficiency Virus
HMO	Health Maintenance Organization
IME	Indirect Medical Education
IOM	Institute of Medicine
IPA	Independent Practice Association
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
MCCA	Medicare Catastrophic Coverage Act of 1988
MedPAR	Medicare Provider Analysis and Review file
MGCRB	Medicare Geographic Classification Review Board
MRI	Magnetic Resonance Imaging
MSA	Metropolitan Statistical Area
NCHS	National Center for Health Statistics
NCI	National Cancer Institute
NMES	National Medical Expenditure Survey
OBRA	Omnibus Budget Reconciliation Act
OMB	Office of Management and Budget
PPO	Preferred Provider Organization
PPRC	Physician Payment Review Commission
PPS	Prospective Payment System
PRO	Peer Review Organization
ProPAC	Prospective Payment Assessment Commission
RBRVS	Resource-Based Relative Value Scale
SCH	Sole Community Hospital
SHMO	Social Health Maintenance Organization
SNF	Skilled Nursing Facility
SSI	Supplemental Security Income
TEFRA	Tax Equity and Fiscal Responsibility Act of 1982
UR	Utilization Review
VA	Veterans Affairs, Department of
VPS	Volume Performance Standard

TERMS

Adjusted Admissions—A measure of all patient care activity undertaken in a hospital, both inpatient and outpatient. Adjusted admissions are equivalent to the sum of inpatient admissions and an estimate of the volume of outpatient services. This estimate is calculated by multiplying outpatient visits by the ratio of outpatient charges per visit to inpatient charges per admission. (AHA and ProPAC)

Aggregate PPS Operating Margin/Aggregate Total Margin—A PPS operating margin or total margin that compares revenue to expenses for a group of hospitals, rather than a single hospital. It is computed by subtracting the sum of expenses for all hospitals in the group from the sum of revenues and dividing by the sum of revenues. (See also PPS Operating Margin and Total Margin.) (ProPAC)

Ambulatory Surgery Center (ASC)—A free-standing facility that performs a limited number of procedures on an outpatient basis. (ProPAC)

ASC-Approved Procedure—A procedure that has been approved by Medicare for payment in the ASC. A procedure is approved if it can be performed safely in the outpatient setting, if it was performed in the inpatient setting at least 20 percent of the time when it was approved, and if it is performed in physicians' offices no more than 50 percent of the time. (HCFA)

Balance Billing—Physician charges for unassigned claims in excess of Medicare-allowable amounts, for which Medicare patients are responsible, subject to a limit. (ProPAC)

Basic DRG Payment Rate—The payment rate a hospital will receive for a Medicare patient in a particular diagnosis-related group. The payment rate is calculated by adjusting the standardized amount to reflect the level of wage rates in the hospital's area and the costliness of the DRG. (See also Standardized Amount.) (ProPAC)

Beneficiary—A person enrolled in the Medicare program who receives services covered by Medicare. (ProPAC)

Beneficiary Liability—The amount beneficiaries must pay for Medicare-covered services. Liabilities include premiums, copayments, deductibles, and balance billing amounts. (ProPAC)

Bundling—The use of a single payment for a group of related services. (PPRC)

Capital Costs—Medicare defines capital costs as depreciation, interest, leases and rentals, and taxes and insurance on tangible assets like physical plant and equipment. (ProPAC)

Capitation—A method of paying health care providers in which a fixed amount is paid per enrollee to cover a defined set of services over a specified period, regardless of actual services provided. (See also Bundling, Fee for Service, and Rate Setting.) (ProPAC)

Carrier—An organization, typically an insurance company, that has a contract with the Health Care Financing Administration to administer claims processing and make Medicare payments to health care providers for most Medicare Part B benefits. (See also Fiscal Intermediary and Part B.) (HCFA)

Case Mix—The mix of patients treated within a particular institutional setting, such as the hospital. Patient classification systems, such as the DRG system, can be used to measure hospital case mix. As a result, patient classification systems often are called case-mix systems. (ProPAC)

Case-Mix Index (CMI)—A measure of the average costliness of Medicare cases treated by a hospital compared to the national average cost of all Medicare hospital cases. The CMI is based on the distribution of cases across DRGs and the national average relative costliness of cases in each DRG. (HCFA)

Charges—The prices of services provided by a facility. Medicare requires hospitals to apply the same schedule of charges to all patients, regardless of the expected sources or amount of payment. Hospital charges are also referred to as gross patient revenue. (ProPAC)

Community Rating—A method for setting health insurance premiums so they reflect the average risk of health care expenditures for all enrollees in a geographic area. All enrollees with the same coverage face the same premium rate, regardless of their membership in specific insured groups. (See also Experience Rating.) (ProPAC)

Cost Shifting—This occurs when hospitals offset losses due to below-cost payments from some payers or uncompensated care by raising charges to increase revenues from other payers. (ProPAC)

Diagnosis-Related Groups (DRGs)—A system for determining case mix, used for payment under Medicare's PPS and by certain other payers. Originally developed by researchers at Yale University, the DRG system classifies patients into groups based on the principal diagnosis, the presence and type of surgical procedure, patient age, presence or absence of significant comorbidities or complications, and other relevant criteria. The DRG classification system attempts to categorize patients into groups that are clinically meaningful and homogeneous with respect to resource use. There are

currently 491 mutually exclusive DRGs in Medicare's PPS. (See also Case Mix.) (ProPAC)

Disproportionate Share (DSH) Adjustment—A payment adjustment under Medicare's PPS or under the Medicaid program for hospitals that serve a relatively large volume of low-income patients. (CBO)

Enrollee—A person who is covered by health insurance. (See also Beneficiary.) (ProPAC)

Excluded Hospitals and Units—Hospitals and distinct-part units of hospitals that are specifically excluded from Medicare's PPS. These include children's, cancer, long-term, rehabilitation, and psychiatric hospitals. Rehabilitation or psychiatric distinct-part units of acute care hospitals are exempt if they meet certain criteria specified by the Secretary of HHS. Hospitals located in U.S. territories, Federal hospitals, and Christian Science Sanatoria are also excluded from PPS. Excluded facilities remain under cost-based reimbursement, subject to target rate of increase limits, established in accordance with TEFRA. (See also Tax Equity and Fiscal Responsibility Act of 1982.) (48 FR 39755)

Experience Rating—A method for setting health insurance premiums so they reflect an individual enrollee's or group of enrollees' past experience in using health care services. Enrollees in different insured groups may face different premium rates for the same covered benefits. (See also Community Rating.) (ProPAC)

Fee for Service (FFS)—A method of reimbursing health care providers in which payment is made for each unit of service rendered. (See also Bundling, Capitation, and Rate Setting.) (ProPAC)

Financial Accounting Standards Board (FASB)—An independent organization responsible for establishing generally accepted accounting principles. (ProPAC)

Fiscal Intermediary—An entity, usually an insurance company, that has a contract with HCFA to determine and make Medicare payments for Part A and certain Part B benefits to hospitals and other providers of services and to perform other related functions. (See also Part A and Part B.) (HCFA)

Fiscal Year—A 12-month period for which an organization plans the use of its funds, such as the Federal government's fiscal year (October 1 to September 30). Fiscal years are referred to by the calendar year in which they end; for example, the Federal fiscal year 1992 began October 1, 1991, and ended September 30, 1992. Individual providers can designate their own fiscal years, and this is reflected in differences in the time periods covered by the Medicare Cost Reports. (ProPAC)

Gross Domestic Product (GDP)—The value of all goods and services produced within the United States' boundaries for a given period. (ProPAC)

Health Maintenance Organization (HMO)—A managed care plan that integrates financing and delivery of a comprehensive set of health care services to an enrolled population. HMOs may contract with, directly employ, or own participating health care providers. Enrollees are usually required to choose from among these providers and in return have limited copayments. Providers may be paid through capitation, salary, or prenegotiated fee-for-service rates. (See also Capitation, Fee for Service, Managed Care, Managed Care Plan, and Preferred Provider Organization.) (ProPAC)

Indirect Medical Education (IME) Adjustment—A payment adjustment applied to DRG and outlier payments under PPS for hospitals that operate an approved graduate medical education program. For operating costs, the adjustment is based on the hospital's ratio of the number of interns and residents to the number of beds. For capital costs, it is based on the hospital's ratio of interns and residents to average daily census. (HCFA)

Intensity of Services—The number and complexity of patient care services used in the production of a final output (admission or outpatient visit in the case of hospitals). Examples of services going into an admission or outpatient visit include units of nursing care, surgeries, and radiological procedures. (ProPAC)

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)—A diagnosis and procedure classification system designed to facilitate collection of uniform and comparable health information. The disease classification is revised periodically. The

ICD-9-CM is the ninth version and was issued in 1979. This system is the basis for grouping patients into DRGs. (HCFA)

Large Urban Area—A metropolitan statistical area with a population of one million or more, or a New England County Metropolitan Area with a population of 970,000 or more. (See also Metropolitan Statistical Area and Other Urban Area.) (ProPAC)

Long-Term Care—A variety of ongoing health and social services provided for individuals who need assistance on a continuing basis because of physical or mental disability. Services can be provided in an institution, the home, or the community, and include informal services provided by family or friends as well as formal services provided by professionals or agencies. (IOM)

Loss Ratio—The proportion of insurance premiums paid out in benefits. (ProPAC)

Major Teaching Hospitals—Hospitals with an approved graduate medical education program and whose ratio of the number of interns and residents to the number of beds is 0.25 or greater. (See also Other Teaching Hospitals.) (HCFA)

Managed Care—Any health service payment or delivery arrangements used by a health plan or provider to control or coordinate use of health services to contain health expenditures, improve quality, or both. Utilization review is one example of a managed care technique. (See also Managed Care Plan and Utilization Review.) (PPRC)

Managed Care Plan—A health plan that uses managed care arrangements and has a defined system of selected providers that contract with the plan. Enrollees have a financial incentive to use participating providers that agree to furnish a broad range of services to them. Providers may be paid on a prenegotiated fee-for-service, capitated, or salaried basis. (See also Health Maintenance Organization and Preferred Provider Organization.) (ProPAC)

Managed Competition—An approach to health care reform in which health plans compete to provide health insurance coverage with comparable benefits to potential enrollees. (PPRC)

Market Basket Index—An index of the national average annual change in the prices of goods and services providers use to produce health services, also referred to as an input price index. ProPAC has developed separate market baskets for PPS hospital operating inputs, PPS hospital capital inputs, PPS-excluded facility operating inputs, and renal dialysis facility operating and capital inputs. (ProPAC)

Medicare Cost Report (MCR)—An annual report required of all institutions participating in the Medicare program that records each institution's total costs and charges associated with providing services to all patients, the portion of those costs and charges allocated to Medicare patients, and the Medicare payments received. (ProPAC)

Medicare Provider Analysis and Review (MedPAR) File—A HCFA data file that contains charge data and clinical characteristics, such as diagnoses and procedures, for every hospital inpatient bill submitted to Medicare for payment. (ProPAC)

Medigap Policy—A privately purchased insurance policy that supplements Medicare coverage and meets specified requirements. (ProPAC)

Metropolitan Statistical Area (MSA)—A geographic area that includes at least one city with 50,000 or more inhabitants, or a Census Bureau-defined urbanized area of at least 50,000 inhabitants and a total MSA population of at least 100,000 (75,000 in New England). (OMB)

Nursing Facility—An institution that provides skilled nursing care and rehabilitation services to injured, functionally disabled, or sick persons. Formerly, distinctions were made between intermediate care facilities (ICFs) and skilled nursing facilities (SNFs). The Omnibus Budget Reconciliation Act of 1987 eliminated this distinction effective October 1, 1990, by requiring ICFs to meet SNF certification requirements. (See also Skilled Nursing Facility.) (ProPAC)

Other Teaching Hospitals—Those hospitals with an approved graduate medical education program and a ratio of interns and residents to beds less than 0.25. (See also Major Teaching Hospitals.) (ProPAC)

Other Urban Area—A metropolitan statistical area with a population of less than one million, or a

New England County Metropolitan Area with fewer than 970,000. (See also Large Urban Area and Metropolitan Statistical Area.) (ProPAC)

Outliers—Under the Medicare program, cases with extremely long lengths of stay (day outliers) or extraordinarily high costs (cost outliers) compared with others classified in the same diagnosis-related group. Hospitals receive additional payment for these cases under PPS. (ProPAC)

Part A—Medicare Hospital Insurance (HI), (Part A of Title XVIII of the Social Security Act), which covers beneficiaries for inpatient hospital, home health, hospice, and limited skilled nursing facility services. Beneficiaries are responsible for deductibles and copayments. (See also Fiscal Intermediary and Part B.) (ProPAC)

Part B—Medicare Supplementary Medical Insurance (SMI) (Part B of Title XVIII of the Social Security Act), which covers Medicare beneficiaries for physician services, medical supplies, and other outpatient treatment. Beneficiaries are responsible for monthly premiums, copayments, deductibles, and balance billing. (See also Carrier and Part A.) (ProPAC)

Patient Classification System—A set of patient categories, and the criteria for assigning patients to those categories. Under PPS, patients are classified into categories for payment using DRGs. (ProPAC)

Peer Review Organization (PRO)—An organization that contracts with HCFA to perform medical peer review of Medicare claims, including review of completeness and accuracy of hospital diagnosis and procedural information; quality of care; and appropriateness of admission, discharge, and use of services. (ProPAC)

Per Capita Expenditures—The average payment to health care providers per person in a geographic area or population group, covering all or a certain set of health care services. It is calculated by identifying the payments made by or on behalf of each individual using services, aggregating these amounts across all users, and then dividing by the total number of people in the area or group. Ideally, the ratio should be population-based, that is, its numerator (spending) and denominator (number of people) should reflect the same population group. (ProPAC)

Post-Retirement Health Benefits—Health benefits provided to retirees and, typically, to their dependents through an employer's group health plan. (ProPAC)

PPS Operating Margin—A measure that compares PPS operating payments to Medicare-allowable inpatient operating costs. This measure excludes Medicare costs and payments for capital, direct medical education, organ acquisition, and other categories not included among Medicare-allowable inpatient operating costs. It is calculated by subtracting total Medicare-allowable inpatient operating costs from total PPS operating payments and dividing by total PPS operating payments. (ProPAC)

PPS Year—A designation referring to hospital cost reporting periods that begin during a given Federal fiscal year. The sequence of PPS years reflects the number of years since the initial implementation of PPS. For example, PPS 1 refers to hospital fiscal years beginning during the Federal fiscal year 1984, which was the first year of PPS. For a hospital with a fiscal year beginning July 1, PPS 1 covers the period from July 1, 1984, to June 30, 1985. (See also Fiscal Year.) (ProPAC)

Preferred Provider Organization (PPO)—A managed care plan that contracts with providers to furnish services. Providers are paid on the basis of prenegotiated fee-for-service rates. Enrollees are offered financial incentives to use preferred providers, but are partially covered for services rendered by nonparticipating providers. (See also Fee for Service, Health Maintenance Organization, Managed Care, and Managed Care Plan.) (PPRC and ProPAC)

Productivity—The ratio of outputs (goods and services produced) to inputs (resources used in production). Increased productivity implies that the hospital or health care organization is either producing more output with the same resources, or the same output with fewer resources. (ProPAC)

Prospective Payment—A method of paying health care providers in which rates are established in advance, and providers are paid these rates regardless of the costs they actually incur. (ProPAC)

Prospective Payment System (PPS)—Medicare's acute care hospital payment method for inpatient

care. Prospective per-case payment rates are set at a level intended to cover operating costs in an efficient hospital for treating a typical inpatient in a given diagnosis-related group. Payments for each hospital are adjusted for differences in area wages, teaching activity, care to the poor, and other factors. Hospitals may also receive additional payments to cover extra costs associated with atypical patients (outliers) in each DRG. Capital costs, originally excluded from PPS, are being phased into the system. By 2001, capital payments will be made on a fully prospective, per-case basis. (See also Capital Costs, Diagnosis-Related Groups, Outliers, and Prospective Payment.) (ProPAC)

Rate Setting—A method of paying health care providers in which the Federal or state government establishes payment rates for one or more payers for various categories of health services. (PPRC and ProPAC)

Resource-Based Relative Value Scale (RBRVS)—An index used to adjust Medicare fee-for-service payments to physicians to reflect the relative resource use of each service. (ProPAC)

Risk Adjustment—Increases or reductions in the amount of payment made to a health plan on behalf of a group of enrollees to compensate for health care expenditures that are expected to be lower or higher than average. (See also Risk Selection.) (PPRC and ProPAC)

Risk Selection—Enrollment choices made by health plans or enrollees on the basis of perceived risk, which result in variation in expected health care expenditures across plans. (PPRC and ProPAC)

Skilled Nursing Facility (SNF)—An institution that has a transfer agreement with one or more participating hospitals, provides primarily inpatient skilled nursing care and rehabilitative services, and meets other specific certification requirements. (See also Nursing Facility.) (IOM)

Small Rural Medicare-Dependent Hospitals—Under OBRA 1989, rural hospitals with fewer than 50 beds and a Medicare share of inpatient days or admissions of more than 60 percent. These hospitals were eligible for the same payment rules as sole community hospitals. This provision expired on March 31, 1993, but was partially reinstated until September 30, 1994, under OBRA 1993. (ProPAC)

Sole Community Hospital—A rural hospital that is designated for special treatment under PPS as the only provider of hospital care in its market area. Under PPS, sole community hospitals benefit from payment provisions intended to ensure their financial viability and access to hospital services for Medicare beneficiaries. (ProPAC)

Standardized Amount—An amount, used as the basis for payment under PPS, that is intended to represent the national average operating cost of inpatient treatment for a typical Medicare patient in a reasonably efficient hospital in an urban or rural area. Standardized amounts are based on Medicare costs reported by hospitals for cost reporting periods ending during 1982, adjusted for geographic location and certain hospital characteristics, such as teaching activity. The adjusted amounts are updated to the year of payment by an annual update factor. (See also Update Factors.) (CRS)

Supplemental Insurance—Any private health insurance plan held by a Medicare beneficiary, including medigap policies and post-retirement health benefits. (ProPAC)

Swing-Bed Hospital—A hospital participating in the Medicare swing-bed program. This program allows rural hospitals with fewer than 100 beds to provide skilled post-acute care services in acute care beds. (HCFA)

Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA)—Legislation that established target rate of increase limits on reimbursements for inpatient operating costs per discharge under Medicare. A facility's target amount is derived from costs in a base year updated by the annual allowable rate of increase to the current year. Medicare payments for operating costs generally may not exceed the facility's target amount. These provisions still apply to hospitals and units excluded from PPS. (See also Excluded Hospitals and Units.) (ProPAC)

Total Margin—A measure that compares total hospital revenue and expenses for inpatient, outpatient, and non-patient care activities. The total margin is calculated by subtracting total expenses from

total revenue and dividing by total revenue. (ProPAC)

Uncompensated Care—Care rendered by hospitals or other providers without payment from the patient or a government-sponsored or private insurance program. It includes both charity care, which is provided without the expectation of payment, and bad debts, for which the provider has made an unsuccessful effort to collect payment due from the patient. (ProPAC)

Update Factors—ProPAC's annual recommended increases to certain Medicare payments, which would be applied to the previous year's base payment rates, if adopted by the Congress. The update factors are intended to reflect changes in the prices of inputs used to provide patient care services, as well as changes in productivity, technological advances, quality of care, and long-term cost-effectiveness of services. ProPAC recommends separate update factors for PPS hospital operating payments, PPS hospital capital payments, the TEFRA target amounts for PPS-excluded hospitals and distinct-part units, and composite rate payments to dialysis facilities. (See also Market Basket Index.) (ProPAC)

Utilization Review (UR)—The review of services delivered by a health care provider to determine whether those services were medically necessary. The review can be performed on a concurrent or retrospective basis. (PPRC)

Volume Performance Standard (VPS)—A mechanism to adjust updates to fee-for-service payment rates based on how actual aggregate expenditure increases compare to predetermined target rates of increase. (See also Fee for Service.) (PPRC and ProPAC)

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